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1911

NEW YORK UNIVERSITY

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BULLETIN

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VOL. XI.

FEBRUARY, 1911.

No. 4

LIBRARY  
OF THE  
UNIVERSITY OF CALIFORNIA

The Summer School  
at  
University Heights

SEVENTEENTH YEAR

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JULY 5—AUGUST 15, 1911

PRELIMINARY ANNOUNCEMENTS

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PUBLISHED BY NEW YORK UNIVERSITY AT THE UNIVERSITY BUILDING,  
WASHINGTON SQUARE, EAST, MONTHLY, NOVEMBER—MARCH, AND  
WEEKLY, APRIL—JUNE, AND ENTERED AT THE NEW YORK POST OFFICE  
AS SECOND-CLASS MATTER UNDER ACT OF JULY 16, 1894.

# **New York University Summer School, 1911**

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## **Date**

The School will open Wednesday morning, July 5th, 1911, at 8.30 A.M., and close Tuesday afternoon, August 15th.

Certain courses in the Department of Manual Arts will continue only during the first three weeks. The courses in Public School Music will be given only during the last three weeks, beginning July 26th.

## **Admission and Enrollment**

All courses are open to both men and women who are qualified, in the judgment of the instructor, to pursue them. No examination is required for admission.

Upon entering, students will enroll their names at the office of the Director, in the Library Building, and pay the required fees to the Bursar. The offices will be open for consultation and enrollment, beginning July 3rd, from 10 A.M. to 1 P.M., and from 2 P.M. to 4 P.M.

## **Fees**

The charge for instruction in the Summer School, including the examination and certificate, will be at the rate of \$10.00 for each course of one hour a day for six weeks, except that students taking only one hour will be charged \$15.00. No matriculation fee is charged in the Summer School.

Fees for material in the laboratory courses vary from \$3.00 to \$10.00 per course, the usual charge being \$5.00 per course of thirty hours.

In the Music Department the fee will be \$15.00 for the course of five hours a day, for three weeks. For students taking a partial course the same rate per hour will be charged as in other departments.

Students will not be permitted to enroll for more than three hours of lectures a day and one laboratory course. In special cases permission may be granted students to take a fourth lecture hour as auditor without credit.

## **Credit for Summer Courses**

The Summer School courses, with few exceptions, are given full credit by the University toward the appropriate degrees, viz.: Bachelor of Arts, Bachelor of Science, Master of Arts, Doctor of Philosophy, Master of Pedagogy, Doctor of Pedagogy, Bachelor of Commercial Science, in the case of students qualified to become candidates for these degrees.

The courses are also accepted by the New York City Board of Education as meeting the requirements in certain subjects, and entitling to exemption from certain examinations for teachers' licenses.

## **Board and Rooms**

Gould Hall, the large dormitory, and the University Residence Houses, East Hall, South Hall and West Hall, all on the University campus, are open to students of the Summer School. The College Fraternity Houses in the immediate neighborhood and private residences as may be required, are also opened to the students under the management of the University.

Table board will be provided by the University in East Hall, and by private boarding houses in the neighborhood. The rate for table board will be \$5.50 per week.

The rates for rooms will be \$10.00-\$16.00 per person for six weeks, according to location. Rooms will also be rented for three weeks. Prices on application. Rental includes hot and cold baths, light, service and necessary furniture. Bedclothing and towels will be supplied by the University for the six weeks, at a charge of \$2.00 for washing.

The campus of the University occupies forty acres on the edge of a bluff, 180 feet above the Harlem River. The high situation makes it well suited for summer residence. It is generally considered one of the most beautiful college sites in the world.

## **Popular Lectures and Excursions**

Popular lectures or other forms of entertainment will be provided two evenings or afternoons each week in the University Auditorium, and will be open free to all students. There will also be the usual faculty dances in the gymnasium.

On Saturday mornings excursions will be made, under a competent guides to various points of interest about the city.

The University athletic field and tennis courts will be open to students.

## **Hours of Lectures**

There are five lecture periods in the morning—8.30-1.30, and three in the afternoon—2-5. Students are advised not to attempt more than three hours of lectures or recitations a day.

Full information regarding the Summer School will be given in the Bulletin published about April 1st.

The Director will be glad to answer any special inquiries which may be sent him. Address: Director, JAMES E. LOUGH, New York University, Washington Square, New York City.

## Preliminary Outline of Courses

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### I. COURSES PRIMARILY PEDAGOGICAL

- SG1. History of Education, 60 hours, Professor Horne.
- SG2. Seminar in History of Education, 30 hours, Professor Horne.
- S3. Introductory Psychology, 30 hours, Professor Lough.
- S4. Educational Psychology, 30 hours, Professor Lough.
- S5. Principles of Education, 60 hours, Superintendent Taylor.
- S6. Laboratory Psychology, 60 hours, Professor Lough and Dr. Radosavljevich.
- SG7. Experimental Psychology, 30 hours, Professor Lough and Dr. Radosavljevich.
- SG8. Experimental Pedagogy, 60 hours, Dr. Radosavljevich.
- S9. Methods of Teaching High School Physics, 60 hours, Professor Hering.
- S10. Methods of Teaching Modern Languages, 30 hours, Dr. Monteser.
- S11. Methods of Model Teaching, 30 hours, Dr. Edmund.
- S12. Methods in English for Elementary Schools, 30 hours, Dr. Edmund.
- S13. Vocal and Literary Interpretation of Shakespeare, 30 hours, Dr. Edmund.
- S14. Reading and Dramatic Interpretation, 30 hours, Dr. Edmund.
- S15. Program Making and Method in Kindergarten, 30 hours, Miss Mills.
- S16. Kindergarten Technique, 30 hours, Miss Mills.
- S17. Kindergarten Songs, Rhythms and Games, 30 hours, Miss Merriman and Miss Mills.
- S18. Stories and Story Telling, 30 hours, Miss Lindsay.
- S19. Content and Meaning of Froebel's Mother Play, 30 hours, Miss Mills.
- S20. Children's Books and Reading, 30 hours, Mr. Moses.
- S21. Principles of the Supervision of Manual Arts, 60 hours, Dr. Haney.
- S22. Principles and Practice of Design, 60 hours, Dr. Haney.
- S23. Elementary Shop Work, 60 hours, Mr. Garritt.
- S24. Advanced Shop Work, 60 hours, Mr. Garritt.
- S25. Methods of Teaching Constructive Work, 60 hours, Mr. Garritt.
- S30a. Rote Songs and Dictation (A), 15 hours, Miss MacConnell.
- S31a. Study of Material in Primary Grades, 15 hours, Mr. Scales.
- S32a. Methods of Teaching Music in the Primary Grades, 15 hours, Miss Dütting.

- S33a. Sight Singing and Notation, 15 hours, Mr. Scales.
- S34a. Melody Writing, 15 hours, Principal Tapper.
- S30b. Method of Teaching Music in the Grammar Grades, 15 hours, Miss Dütting.
- S31b. Dictation (B), 15 hours, Miss MacConnell.
- S32b. Study of Material in the Grammar Grades, 15 hours, Mr. Scales.
- S30c. High School Music, 15 hours, Dr. Rix.
- S31c. Harmony (A), 15 hours, Principal Tapper.
- S32c. Dictation (C), 15 hours, Miss MacConnell.
- S33c. Practice Teaching, 15 hours, Miss Dütting.
- S34c. Chorus, 15 hours, Dr. Rix.
- S40. Domestic Art, 60 hours, Miss Johnson.
- S41. Domestic Art (Hand Sewing), 30 hours, Miss Johnson.
- S42. Domestic Art (Dressmaking), 60 hours, Miss Close.
- S43. Costume Designing, 30 hours, Miss Close.
- S44. Basketry, 30 hours, Miss Johnson.
- S50. School Gardens, 60 hours, Mr. Parsons.
- S60. Domestic Science (First Year Courses), 60 hours, Miss Christian.
- S61. Domestic Science (Second Year Courses), 60 hours, Miss Christian.
- S62. Domestic Science (Third Year Courses), Miss Christian.

## II. COURSES PRIMARILY COLLEGIATE

### Latin

- S1. Vergil, 30 hours, Professor Sihler.
- S2. Latin Prose and Composition, 30 hours, Professor Sihler.
- S3. Collegiate Latin, 30 hours, Professor Sihler.

### Greek

- S1a. Pre-collegiate Greek, 30 hours, Professor Waters.
- S2. Homer, 30 hours, Professor Waters.
- S3. Greek Art, 30 hours, Professor Waters.
- S4. Greek History, 30 hours, Professor Waters.

### Semitics

- S1. Advanced Hebrew, 30 hours, Professor Isaacs.
- S2. Targum, 30 hours, Professor Isaacs.
- S3. Mishna, 30 hours, Professor Isaacs.
- S4. Mishna Sanhedrin, 30 hours, Professor Isaacs.

### English

- S1. English Composition, 30 hours, Professor Bouton.
- S2. The Literature and Art of the Short Story, 30 hours, Professor Bouton.
- S3. History of English Literature, 30 hours, Professor Bouton.  
*Additional Courses in English will be announced in the complete bulletin.*

### German

- S1. Beginner's Course, 30 hours, Professor McLouth.
- S2. Modern German Comedy, 30 hours, Professor McLouth.
- S3. Classical German Prose, 30 hours, Professor McLouth.

### French

- S1. Elementary French, 30 hours, Professor Delamarre.
- S2. Intermediate French, 30 hours, Professor Delamarre.
- SG5. The Evolution of the French Novel in the XIXth Century, Professor Delamarre.

### Spanish

- S1. Beginner's Spanish, 30 hours, Mr. Iturralde.
- S2. Intermediate Spanish, 30 hours, Mr. Iturralde.
- S3. Advanced Course in Spanish, 30 hours, Mr. Iturralde.

### Italian

- S1. Elementary Course, 30 hours, Dr. Pugliatti.
- S2. Intermediate Course, 30 hours, Dr. Pugliatti.
- S3. Advanced Course, 30 hours, Dr. Pugliatti.

### Philosophy

The following Courses announced as Courses Primarily Pedagogical may be taken for Collegiate credits:

- SG1. History of Education, 60 hours, Professor Horne.
- SG2. Seminar in History of Education, 30 hours, Professor Horne.
- S3. Introductory Psychology, 30 hours, Professor Lough.
- S4. Educational Psychology, 30 hours, Professor Lough.
- S6. Laboratory Psychology, 60 hours, Professor Lough and Dr. Radosavljevich.

## History and Political Science

- S1. Political and Constitutional History of the United States, 30 hours, Professor Brown.
- S2. American Civil Government, 30 hours, Professor Brown.
- S3. History of Europe in the XIXth Century, 30 hours, Dr. Jones.
- S4. The Economic History of England, 30 hours, Dr. Jones.
- SG1. Seminar in American Colonial History, 30 hours, Professor Brown.
- SG2. Seminar in the French Revolution, 30 hours, Dr. Jones.

## Economics

- S1. Elements of Economics, 30 hours, Dr. Galloway.
- S2. Industrial History, 30 hours, Dr. Galloway.
- S3. Industrial Organization, 30 hours, Dr. Galloway.
- S4. Advanced Economics, 30 hours, Dr. Galloway.

### *At Washington Square*

- S5. Practice of Book-keeping, 30 hours, Mr. Greendlinger (no collegiate credit).
- S6. Principles of Accounting, 60 hours, Mr. Greendlinger.

## Sociology

- S1. Sociology, 60 hours, Dr. Binder.
- S2. Social Problems, 60 hours, Dr. Binder.

## Mathematics

- S1. Algebra, 30 hours, Professor Edmondson.
- S2. Solid Geometry, 30 hours, Mr. Thorne.
- S3. Trigonometry, 30 hours, Mr. Thorne.
- S4. Analytic Geometry, 30 hours, Professor Edmondson.
- S5. Differential Calculus, 30 hours, Mr. Thorne.
- S6. Integral Calculus, 30 hours, Mr. Thorne.

## Astronomy

- S1. Elementary Astronomy, 30 hours, Professor Edmondson.

## Physics

- S1. General Physics, 30 hours, Professor Hering.
- S2. Laboratory Course, 30 or 60 hours, Professor Hering.
- S3. Advanced Laboratory Course, 30 or 60 hours, Professor Hering.

(For Lecture and Laboratory Course in High School Physics, see Courses Primarily Pedagogical, S8.)

### Chemistry

- S1. Introductory Lecture Course, 60 hours, Professor Hill.
- S2. Introductory Laboratory Course, 30 hours, Professor Hill.
- S3. Qualitative Analysis, 60 hours, Professor Simmons.
- S4. Quantitative Analysis, 60 hours, Professor Simmons.
- S5. Organic Chemistry, 60 hours, Professor Simmons.
- S6. Advanced Laboratory Practice, 30 or 60 hours, Professors Simmons and Hill.
- SG10. Research, 30 or 60 hours, Professors Simmons and Hill.

### Biology

- S1. General Zoology, 60 hours, Professor Bristol.
- S2. Comparative Anatomy, 60 hours, Professor Bristol.
- S3. Human Anatomy and Physiology, 30 hours, Professor Bristol.
- S4. Dissection, 60 hours, Professor Bristol and Miss Hamilton.
- S5. Embryology, 60 hours, Mr. Bartelmez.

### Botany

- S1. Elementary Botany, 60 hours, Mr. Benedict.
- S2. Advanced Botany—Morphology, 30 hours, Mr. Benedict.
- S3. Advanced Botany—Physiology, 30 hours, Mr. Benedict.
- S4. Advanced Botany—General Laboratory and Methods, Mr. Benedict.
- S5. Trees and Timbers, 30 hours, Mr. Benedict.

### Geography and Geology

- S1. Geography, 30 hours, Professor Woodman.
- S2. Geography of Commerce and Industry, 60 hours, Professor Woodman.
- S3. General Physiography and Geology, 60 hours, Professor Woodman.

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*Additional courses in Pedagogy, English and Science will be announced in the complete bulletin, which will be published about April 1st, and will give a detailed description of the courses here named and schedule of the hours of lectures. Copies of the bulletin will be sent free on application to*

DR. GEORGE C. SPRAGUE, REGISTRAR,

New York University, Washington Square,  
New York City.

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1911

NEW YORK UNIVERSITY

BULLETIN

VOL. XI.

APRIL 7, 1911.

No. 6

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The Summer School  
at  
University Heights

SEVENTEENTH YEAR

JULY 5—AUGUST 15, 1911

PUBLISHED BY NEW YORK UNIVERSITY AT THE UNIVERSITY BUILDING,  
WASHINGTON SQUARE, EAST, MONTHLY, NOVEMBER—MARCH, AND  
WEEKLY, APRIL—JUNE, AND ENTERED AT THE NEW YORK POST OFFICE  
AS SECOND-CLASS MATTER UNDER ACT OF JULY 16, 1894.

## FOREWORD

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*The Director of the Summer School desires to call the attention of students to the following features of the Summer School of 1911:*

### ACCESSIBILITY

*University Heights is easily reached from any section of the metropolitan district which is served by the subway and elevated railroad lines. The Campus is a short ten minutes' walk from the 207th St. subway station. Excellent trolley-car service connects the University with the 181st St. and 207th St. stations of the subway, and with the elevated railroad terminus at 155th St. Students coming from Westchester County and the adjoining territory can easily reach University Heights by any of the Union Railway trolley lines.*

### BOARD AND ROOMS

*Students desiring to reside at University Heights for the summer session can secure rooms in the residence halls of the University, or in the several fraternity houses and private houses near the Campus. The boarding department will be conducted under the direct supervision of the Summer School authorities.*

### SPECIAL DEPARTMENTS

*The courses in Principles of Supervision and Methods of Teaching the Manual Arts and in the Principles and Practice of Design, offered by the Department of Manual Arts, will be given only during the first three weeks of the Summer School session. Attention is called to the fact that these courses will not be offered in 1912. Courses in the Department of Public School Music will be given only during the last three weeks of the session. All other courses will be given during the entire six weeks session.*

### NEW APPOINTMENTS

*Professor Herman Harrell Horne, Ph.D., Professor of the History of Education in the School of Pedagogy, will become a member of the Summer School faculty this year, offering a lecture course and a seminar in the History of Education. Professor Lewis Perry, M.A., Assistant Professor of English in Williams College, will give courses in American Literature and in the English Poets of the Nineteenth Century. Dr. Ernest Bryant Hoag, Lecturer on Hygiene in the University of California, and well-known to teachers as an authority on school hygienic, will give courses in School Hygiene and Public Health.*

### COURSES AT WASHINGTON SQUARE

*Courses in Bookkeeping Practice and Principles of Accounting will be offered in the University Building at Washington Square by instructors of the School of Commerce, Accounts and Finance. Courses in Italian and Semitics will also be given in the Washington Square Building, for students who find it more convenient to attend down town.*

*For information regarding the Summer School, address JAMES E. LOUGH, Ph.D., Director of the Summer School, Washington Square, New York City. The Director may be seen personally in the office of the School of Pedagogy, Ninth Floor, University Building, Washington Square, until May 27th.*

*Applications for rooms should be addressed to Albert Woolsey, Superintendent of Grounds and Buildings, University Heights, New York City.*

# THE SUMMER SCHOOL

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## Faculty

JOHN H. MACCRACKEN, PH.D.

*Syndic of the University*

JAMES E. LOUGH, PH.D.

*Psychology. Director of the School*

DANIEL W. HERING, C.E., PH.D., LL.D.

*Physics*

ABRAM S. ISAACS, PH.D.

*Semitics*

ERNEST GOTTLIEB SIHLER, PH.D.

*Latin*

MARSHALL S. BROWN, M.A.

*History and Government*

CHARLES L. BRISTOL, PH.D.

*Biology*

LAWRENCE A. McLOUTH, B.A.

*German*

ARCHIBALD L. BOUTON, M.A.

*Rhetoric and English Literature*

THOMAS W. EDMONDSON, PH.D.

*Mathematics*

WILLIAM E. WATERS, PH.D.

*Greek and History of Art*

ARTHUR E. HILL, PH.D.

*Chemistry*

JOSEPH EDMUND WOODMAN, Sc.D.

*Geography and Geology*

HERMAN HARRELL HORNE, PH.D.

*History of Education*

LEE GALLOWAY, PH.D.

*Industrial History and Industrial Organization*

JOHN P. SIMMONS, Sc.D.

*Chemistry*

JAMES PARTON HANEY, B.S., M.D.

(Director of Art, High Schools, New York City)

*Manual Arts*

MISS JENNY B. MERRILL, P.D.D.

(Formerly Director of Kindergartens, New York City Public Schools, Boroughs  
of Manhattan, Bronx, and Richmond)

*Kindergarten Methods*

MISS GERTRUDE EDMUND, B.S., P.D.D.

*Special Methods*

JOSEPH S. TAYLOR, P.D.D.,

(District Superintendent, New York City Schools)

*Principles of Education*

LEWIS PERRY, M.A.

(Assistant Professor of English, Williams College)

*English Literature*

ERNEST BRYANT HOAG, A.M., M.D.

(Lecturer on Hygiene, University of California)

*School Hygiene and Public Health*

LOUIS DELAMARRE, PH.D.

*French*

FREDERICK MONTESER, P.D.D., PH.D.

(Head of Department of German, De Witt Clinton H. S., New York City)

*Special Methods*

RUDOLPH M. BINDER, PH.D.

*Sociology*

PAUL R. RADOSAVLJEVICH, PH.D., P.D.D.

*Experimental Pedagogy*

P. L. THORNE, M.S.

*Mathematics*

THEODORE F. JONES, PH.D.

*History*

MAXIMO ITURRALDE

*Spanish*

RALPH C. BENEDICT, PH.B.

*Botany*

GEORGE W. BARTELMEZ, PH.D.

(Instructor in Anatomy, University of Chicago)

*Biology*

GEORGE P. EICKMAN, PH.D.

*Semitics*

THOMAS P. PUGLIATTI, DOTT. PHIL.

*Italian*

MONTROSE J. MOSES, B.S.

(Author of Children's Books and Reading)

*Children's Books and Reading*

P. J. ESQUERRE, B.A.

*Accounting*

W. W. DOUGLASS, B.C.S.

*Accounting*

MISS JANE G. CLOSE

(Supervisory Teacher, Public Schools, Manhattan)

*Domestic Art*

MRS. FRANCES CONSALUS

(Supervisory Teacher, Public Schools, Manhattan)

*Domestic Art*

HENRY GRISCOM PARSONS

*School Gardens*

ALBERT W. GARRITT

(Assistant to the Director of Manual Arts, New York City Schools)

*Shop Work and Drawing*

MISS HARRIETTE M. MILLS

(Principal of Harriette M. Mills, Kindergarten School)

*Kindergarten Methods*

MISS MAUD LINDSAY

(Author of Mother Stories, etc.)

*Kindergarten Stories*

MISS ELSIE A. MERRIMAN

(Assoc. Principal Harriette M. Mills, Kindergarten School)

*Kindergarten Games*

THOMAS TAPPER

(Institute of Musical Art)

*Music*

FRANK R. RIX, M.D.

(Director of Music, New York City Schools)

*Music*

MISS FRANCES DÜTTING

(Instructor in Music, Normal College, New York City)

*Music*

BURTON T. SCALES, M.A.

(Director of Music, Penn Charter School, Philadelphia)

*Music*

MISS M. F. MACCONNELL

*Music*

MISS M. KATHERINE CHRISTIAN

(Supervisory Teacher, Public Schools, New York City)

*Domestic Science*

MISS MARY E. GEARING

(Supervisory Teacher, Public Schools, Houston, Texas)

*Domestic Science*

MISS ANNA L. REUTINGER

*Domestic Science*

A. B. FIRMAN, B.S.

*Assistant in Biology*

J. M. KAINE, B.S.

*Assistant in Biology*

WILLIAM C. BARBOUR

*Assistant in Botany*

EDWARD A. STEVENS, B.S.

*Assistant in Physics*

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BELLE CORWIN, M.D.

*Librarian of the General Library*

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FRANK A. FALL, M.A.

*Bursar of the University*

GEORGE C. SPRAGUE, PH.D.

*Registrar of the University*

## THE SUMMER SCHOOL

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### General Statement

The Summer School of New York University will open at University Heights, New York City, for the seventeenth year on Wednesday, July 5, 1911, and will continue six weeks, closing August 15th. The courses offered are, for the most part, duplicates or equivalents of regular courses given in the University Schools during the winter. Full University credit is given for the course, when completed by satisfactory examinations, unless otherwise stated. Final examinations will be held August 14th-15th and are optional with all students except those desiring credit or certificates for their work.

All classes meet daily Monday-Friday. The classes that meet one hour a day for six weeks are credited as thirty-hour courses; those meeting two hours a day are credited as sixty-hour courses. There are five one-hour periods in the morning session, the first beginning at 8.30 and the last at 12.30, and three one-hour periods in the afternoon. The laboratories will be open for students on Saturday, but no class sessions will be held on that day.

No student may take more than three hours of lecture courses and one laboratory course a day, except as an auditor.

### Admission and Enrollment

No examination is required for admission to the Summer School. All courses are open to both men and women who are deemed qualified to pursue them by the instructors in charge.

Students will first enroll in the Director's office in the Gymnasium at University Heights, obtain his approval of their election of courses and pay the required fees to the Bursar. They will then be given an admission card for each course, which is to be handed to the instructor in charge at the first meeting.

The Director will be at his office for purposes of consultation and enrollment on July 3d, 4th and 5th, from 10-1 and 2-5. A schedule of regular office hours of the Director and of consultation hours of the several instructors will be posted upon the bulletin boards during the first week of the session.

## Fees

The charge for instruction for six weeks' courses in the Summer School, including the examination and certificate, will be at the rate of \$10.00 for each course of one hour a day for six weeks, except that students taking only one hour will be charged \$15.00. No matriculation fee is charged in the Summer School.

Visitors wishing to attend the lecture courses of the Summer School may be admitted as auditors, for not over two weeks, upon payment of a fee of \$5.00 per week.

In the three weeks' courses of the Department of Manual Arts the charge for instruction will be \$30.00 for each course. (See page 33.)

In the Music Department the fee will be \$15.00 for the course of five hours a day, for three weeks. For students taking a partial course the same rate per hour will be charged as in other departments.

The fee for Bookkeeping Practice and Principles of Accounting is \$25.00 for each course.

Students will not be permitted to enroll for more than three hours of lectures a day and one laboratory course. In special cases permission may be granted students to take a fourth lecture hour as auditor without credit.

Special fees for laboratory material are as follows:

Chemistry, Physics, Biology, Botany (each laboratory course of one hour credit)	\$5.00
Domestic Art (each course)	3.00
Basketry	4.00
Kindergarten Technique	2.00
Garden Course	3.00
Domestic Science	10.00

There are no other charges except for breakage, in case of unusual carelessness in the handling of apparatus. In certain laboratory courses, however, deposits are required, which will be returned upon the surrender of apparatus and the payment of breakage.

The number of hours of any course upon which the charge per hour will be based will be found under the Outline of Instruction, on page 17. A course of fifteen single hours is reckoned as a half University hour; a course of thirty hours, as one University hour; a course of sixty hours, as two University hours, etc.

## Credit for Summer Courses

The unit of University credit is the hour—which is the work of a course meeting one hour a week for an academic year of not less than thirty weeks, exclusive of vacations. The maximum amount of credit which is allowed in any of the University Schools for the work of a single Summer School is three hours, with one additional hour in special cases for laboratory work. Credit will be allowed for Summer School work by the faculties of the various Schools of the University, as follows:

### I. Credit in the School of Pedagogy

Credit will be given in the School of Pedagogy toward the degree of Pd.M. and Pd.D. for courses announced as *Courses Primarily Pedagogical*, unless otherwise stated, where the student desiring such credit is already a member of that School or is eligible for enrollment.

### II. Credit in the Graduate School

Credit will be given in the Graduate School toward the degrees of M.A., M.S., Ph.D. and Sc.D., for those courses offered in the Summer School which are of graduate grade and which are indicated by the prefix SG before the number. In order to obtain such credit the student must:

(a) Be matriculated or qualified to matriculate in the Graduate School.

(b) Devote his entire time during the six weeks' session to one full course or two half courses. Students who enroll for more than this amount of work will be allowed no credit in the Graduate School. In any department, except Education, a full course requires two hours' classroom attendance daily; in the Department of Education three hours' classroom attendance is required daily.

The maximum credit allowed for the work of *one* Summer School will be one full course. The total maximum credit for Summer School work toward the M.A. or M.S. degrees will be two full courses. Of the four courses required for the major series for the Ph.D. or Sc.D. degrees only one may be taken in Summer Schools.

### III. Credit in University College

Credit will be given in the University College for Courses taken in the Summer School which are equivalent to courses given in the College curriculum. The courses offered in the Summer School of 1911 which are accepted are as follows:

Latin, S3.	Sociology, S1.
English, S1, S2, S3.	Mathematics, S1, S2, S3, S4,
German, S1, S2, S3.	S5, S6
French, S1, S2, SG5.	Astronomy, S1.
Spanish, S1, S2, S3.	Physics, S1, S2, S3.
History, S1, S2, S3, S4.	Chemistry, S1, S2, S3, S4, S5, S6.
Economics, S1, S2, S3, S4.	Biology, S1, S2, S3, S4, S5.

A student who has completed two years or more of a college course in a college or university of recognized standing, may complete the work required for the bachelor's degree in Arts or Science at New York University by taking the courses, or equivalents recognized by the Faculty, required of such students for graduation, in the Summer School, provided that at least four sessions of the Summer School be attended and the work there elected be successfully completed. Four summer sessions are regarded as approximately equal to one year's work in the University College.

#### IV. Credit in School of Applied Science

Credit will be given in the School of Applied Science for courses taken in the Summer School which are equivalent to courses in the curriculum in the School of Applied Science. The courses offered in the Summer School of 1911 which are so accepted are as follows:

##### SUMMER SCHOOL COURSES

Mathematics, S1
" S4
" S5
" S6
Physics, S2
Chemistry, S1
" S3
" S4
French, S2
German S2, S3
English, S1
Philosophy, S3
Geology, S3

##### APPLIED SCIENCE COURSES

= Mathematics	3
= "	4
= "	5
= "	6
= Physics,	7 or 8
= Chemistry	1
= "	6
= "	7
= French	3
= German	3
= English	3
= Philosophy	5
= Geology	3

Students desiring to secure credit in the School of Applied Science must secure permission to take summer work from the Faculty and must apply to the Director for a special form of certificate.

### V. Credit in the Collegiate Division

Courses in the Summer School which are announced under the heading *Courses Primarily Collegiate* will, unless otherwise stated, be credited in the Collegiate Division, subject to the regulations of that School, toward the degree of B.S. in Pedagogy, provided the student is enrolled or eligible for enrollment in the Collegiate Division.

### VI. Credit for Admission

Certain courses in the Summer School may be taken for credit toward the entrance requirements of the University College, School of Applied Science and the University and Bellevue Hospital Medical College. Certificates showing the satisfactory completion of such courses in the Summer School will be accepted in lieu of entrance examinations in those subjects. Particulars as to these courses may be obtained by writing the secretaries of the respective schools.

### VII. Credit by the Board of Education

*Exemption on account of studies from examination for certain licenses to teach in the Public Schools of the City of New York.*

Students otherwise qualified to apply for licenses to teach in New York City, who complete certain courses in the University Summer School, may be exempted in part from examinations for certain of their licenses, viz.: license for promotion, license as assistant to principal, and license as principal in elementary schools.

For information respecting the exemptions to be secured, and the scope and character of examination for teachers' licenses, application should be made to the office of the City Superintendent of Schools, Park Avenue and Fifty-ninth Street, New York, N. Y.

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Bulletins containing full information regarding admission, courses, requirements for degrees, etc., in the Graduate School, School of Pedagogy, University College, School of Applied Science, or Collegiate Division, will be sent without charge upon application to the Registrar, New York University, Washington Square, New York City, and should be consulted by students before electing courses for credit in those schools.

### University Heights

University Heights is in the northern part of New York City, in the Borough of the Bronx, twelve miles from the lower end of Manhattan Island. The grounds, which cover forty acres, lie on a high

ridge, overlooking the Harlem River, the Palisades of the Hudson, and Long Island Sound. This ridge of land, with its low temperature and favorable breezes, renders University Heights a most inviting spot for a summer school. Van Cortlandt Park, with its excellent public golf links and tennis courts, can be reached in five minutes on the New York and Putnam Railroad. Bronx Park, with its Botanical Museum and Garden and its Zoological Garden, is about a mile from the University, and can be reached by trolley.

University Heights is reached from downtown by any of the following routes: 1. By the Broadway subway to West 181st St. station (Manhattan), thence by Aqueduct Ave. trolley across Washington Bridge to the corner of the University campus at Aqueduct Ave. and East 181st St. (Bronx). 2. By the Broadway subway (Kingsbridge express) to West 207th St. station (Manhattan), then across the University Heights Bridge, and by private path to the right to the campus—a walk of ten minutes from the station. 3. By either the Sixth or the Ninth Avenue Elevated Lines to 155th Street, thence by the New York and Putnam Railroad to Morris or University Heights—a ride of six minutes from 155th Street. 4. To 155th Street as in 3, thence by the Ogden Avenue trolley, across Central Bridge to the Campus. 5. By the Second or Third Avenue Elevated lines to East 177th Street, thence by trolley to the corner of Aqueduct and Burnside Avenues, one block from the Campus. 6. By West Farms subway to 149th St., thence as in 5. 7. By the New York Central Railroad, from the Grand Central Station at Forty-second Street to Morris Heights Station or University Heights Station—a ride of twenty-five minutes. The University campus is seven minutes' walk from University Heights Station.

Students coming from Yonkers, Mount Vernon, or New Rochelle, or from points on the New Haven or Harlem Railroads, will find University Heights easily accessible by any of the Union Railway trolley lines.

The fare by route 2 is five cents, from any subway station, including Brooklyn; by routes 1, 4, 5, eight cents; by routes 3, 6, ten cents, and by route 7, fourteen cents.

## Library and Laboratories

Summer School students will have the use of the University Library, and will be allowed to draw upon its complete collection of books. The hours during which the Library is open during the Summer School are:

Monday-Friday . . . . .	8 A.M. to 6 P.M. and 7 P.M. to 9 P.M.
Saturday . . . . .	9 A.M. to 1 P.M.

Reference books in the various departments are arranged in the respective seminar rooms, which are planned to afford every facility for advanced study. Special books designed for general consultation and reference will be placed on the reservation shelves in the General Reading Room, where they will be easily accessible to all. The reading room of the library, containing the latest magazines and periodicals, will be open throughout the Summer School at the same hours as the Library.

Students taking courses in sciences will carry on their experimental work in the University laboratories, and will have the entire resources of those laboratories at their disposal for research work. A full description of these laboratories is given in the circulars of the University College and of the School of Applied Science, copies of which may be obtained upon application to the Registrar.

### Social Life

On Monday afternoon, July 10th, from 4 until 6, a reception and lawn party will be tendered to all students of the Summer School, affording them an opportunity to meet all members of the Faculty.

The music room in Gould Hall and the room in Association Hall will be open for social gatherings of students in the evening.

A number of special lectures will be given during the Summer School session by the various instructors. These will be given during the afternoon and evening, the time and place of meeting being announced upon the bulletin board. There will also be concerts and organ recitals by the Music Department.

No stated lectures are scheduled for Saturday, and that day is left free for those students who wish to visit places of interest in and about New York City. Such excursions will be organized among the students of the Summer School and visits will be made to the Museum of Art, the Museum of Natural History, the Brooklyn Navy Yard, Vacation Schools, the Immigrant Station at Ellis Island, the ocean beaches and West Point. These excursions will be under the direction of a capable leader appointed by the Summer School. A number of Saturday excursions are also conducted under the auspices of the Bronx Institute of Arts and Sciences, in which the students of the Summer School are invited to join.

A baseball field, quarter-mile running track and several excellent

tennis courts upon the University grounds are offered free to students. The public golf links at Van Cortlandt Park, the bath houses for sea bathing in Pelham Park (directly east of the University), walks and cycling through the fine parkways and beautiful country of the Bronx and upper New York, offer unrivalled facilities for exercise and athletic diversion.

### Residence at University Heights

*Gould Hall*, the gift of Miss Helen Miller Gould, is designed for 112 students. The construction allows a choice of single rooms or rooms in suites, differently arranged for one, two or three students. The building is of modern fireproof construction and lighted by electricity. One-half of Gould Hall, complete in its appointments, and entirely separated from the other half, is set aside for the exclusive use of women students, and will be under the supervision of a resident lady member of the faculty.

*The University Residence Hours* will include, the present summer, East Hall; South and West Halls—the two large brick mansions on the Schwab estate recently presented to the University and newly furnished and refitted as college dormitories; and, in addition, such fraternity houses and private residences as may be required. The houses on the Schwab estate are beautifully situated on the edge of the bluff, and are surrounded by fine trees. Their broad piazzas command fine views and will be found very cool and attractive.

Rooms will be ready for occupancy on Tuesday afternoon, July 4th. The houses on the Schwab estate will be reserved for women. Married couples may secure rooms in the University Houses, when either the husband or wife is a member of the Summer School. When the parents are accompanied by a child, they will be assigned rooms in a private house near the campus.

Floor plans of Gould Hall and prices of rooms in that Hall and in the University Residence Houses will be found on page 16. Floor plans of the University Residence Houses will be sent free on application.

Students are advised to secure their rooms in advance, as difficulty is experienced each year in finding comfortable accommodations promptly for those arriving at the opening of the school without previous notice. Rooms will be reserved in the order of application on payment of a deposit of \$5.00. A student who is unable to use a room on which a deposit has been made, may transfer his right to another student. The deposit will be returned by the University only in case it receives notice of the intention to surrender the room

before the opening of the school, and in case the room is rented to another student.

Applications, with the \$5.00 deposit, should be sent to the Superintendent of Grounds and Buildings, Mr. Albert Woolsey, University Heights, New York City.

### Table Board

The Dining Hall, which is under the management of a steward appointed by the University, is located directly south of Gould Hall and less than a minute's walk from that building. It is newly fitted and will accommodate 200 comfortably at one time. A lunch room for students not living at the Heights will be conducted in the Engineering Building. The rates for board are as follows:

By the week, 21 meals . . . . .	\$5.50
From Monday lunch to Friday lunch inclusive, 13 meals, . . . . .	4.50
Lunch <i>a la carte</i> or per meal . . . . .	.30

Board may also be secured at boarding houses in the neighborhood, at the fraternity houses, or in private families.

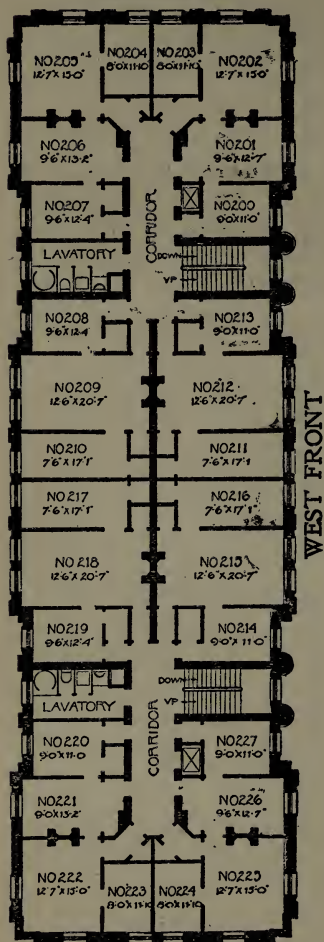
### Baggage Delivery

With the receipt for deposit for room the Superintendent will send tags, properly addressed, to be attached to baggage. To secure prompt delivery of baggage at University Heights, students should place one of these tags on each piece and should give their checks to agents of the Westcott Express Company, or New York Transfer Company, who will be found in uniform at all terminals, and who will give a receipt for delivery of the baggage at the student's room for 75 cents per piece. Students who have not engaged rooms in advance should direct the transfer agent to deliver baggage to Albert Woolsey, Superintendent, New York University, Aqueduct Avenue and 181st St., Bronx. Students from stations on the New York Central or New Haven lines can check baggage to residence on payment of 75 cents per piece. Those who have not arranged for delivery of baggage before arrival at University Heights should hand their checks to the clerk in the college office.

### Mail

Mail for students of the Summer School should be addressed care of New York University, University Heights, New York City. It will be delivered at the college post-office in the library, at 8.15, 10.15, 3.15 and 5.15. A limited number of lock boxes may be rented by those who desire them at 25 cents, with a deposit fee to ensure the return of the key.

The four floors of Gould Hall are divided on this plan.



SECOND FLOOR PLAN

## Prices of Rooms

### Gould Hall

*For term of six weeks.*

Single room . . . . .	\$14.00
Corner room as study or bedroom for one person . . . . .	16.00
Small Bedroom adjoining corner study, for one person . . . . .	12.00
Double Bedroom and large double study (i. e., 211-212, etc.) for one, two or three persons . . . . .	27.00

*For term of three weeks.*

Rooms in Gould Hall not engaged on July 5th may be rented for three weeks at the uniform rate of \$10.00 per person for the three weeks, preference being given to applicants who have reserved in advance rooms for three weeks in other University houses, and who may desire to change.

### University Residence Houses

*For term of six weeks.*

Single room . . . . .	\$14.00
Double room, one or two persons . . . . .	16.00-30.00

*For term of three weeks.*

Single room . . . . .	\$10.00
Double room, one or two persons . . . . .	10.00-20.00

A comparatively small number of rooms are rented also at \$10.00 for six weeks, and \$7.00 for three weeks.

Hot and cold baths, light, service and necessary furniture are included

in the rental. Students may bring bedclothing and towels and make their own arrangements for washing; or, bedclothing and towels will be supplied by the University at an additional charge per person of \$1.00 for three weeks, or \$2.00 for six weeks, for washing.

## Outline of Courses

*A small letter following the number indicates that the course is not equal in time requirements to the corresponding course in another division of the University, and that the course is not accepted, therefore, for credit unless supplemented by other courses. The number of hours stated is the number reckoned for credit, not the time occupied.*

### I. COURSES PRIMARILY PEDAGOGICAL

- SG1. History of Education, 60 hours, Professor Horne.
- SG2. Seminar in History of Education, 30 hours, Professor Horne.
- S3. Introductory Psychology, 30 hours, Professor Lough.
- S4. Educational Psychology, 30 hours, Professor Lough.
- S5. Principles of Education, 60 hours, Superintendent Taylor.
- S6. Laboratory Psychology, 60 hours, Professor Lough and Dr. Radosavljevich.
- SG7. Experimental Psychology, 30 hours, Professor Lough and Dr. Radosavljevich.
- SG8. Experimental Pedagogy, 60 hours, Dr. Radosavljevich.
- S9. Methods of Teaching High School Physics, 60 hours, Professor Hering and Mr. Stevens.
- S10. Methods of Teaching Modern Languages, 30 hours, Dr. Monteser.
- S11. Methods of Model Teaching, 30 hours, Dr. Edmund.
- S12. Methods in English for Elementary Schools, 30 hours, Dr. Edmund.
- S13. Vocal and Literary Interpretation of Shakespeare, 30 hours, Dr. Edmund.
- S14. Reading and Dramatic Interpretation, 30 hours, Dr. Edmund.
- S15. Program Making and Method in Kindergarten, 30 hours, Miss Mills.
- S16. Kindergarten Technique, 30 hours, Miss Mills.
- S17. Kindergarten Songs, Rhythms and Games, 30 hours, Miss Merriman and Miss Mills.
- S18. Stories and Story Telling, 30 hours, Miss Lindsay.
- S19. Content and Meaning of Froebel's Mother Play, 30 hours, Miss Mills.
- S20. Seminar in Kindergarten Education, 30 hours, Dr. Merrill.
- S21. Children's Books and Reading, 30 hours, Mr. Moses.
- S22. Public Health, 30 hours, Dr. Hoag.
- S23. School Hygiene, 60 hours, Dr. Hoag.
- S24. Principles of the Supervision of Manual Arts, 30 hours, Dr. Haney.
- S25. Principles of Design, 30 hours, Dr. Haney.
- S26. Practice of Design, 30 hours, Dr. Haney.

- S27. Elementary Shop Work, 60 hours, Mr. Garritt.
- S28. Advanced Shop Work, 60 hours, Mr. Garritt.
- S29. Special Methods and Organization of Shop Work, 60 hours, Mr. Garritt.
- S30a. Rote Songs and Dictation (A), 15 hours, Miss MacConnell.
- S31a. Study of Material in Primary Grades, 15 hours, Mr. Scales.
- S32a. Methods of Teaching Music in the Primary Grades, 15 hours, Miss Dütting.
- S33a. Sight Singing and Notation, 15 hours, Mr. Scales.
- S30b. Melody Writing, 15 hours, Principal Tapper.
- S31b. Method of Teaching Music in the Grammar Grades, 15 hours, Miss Dütting.
- S32b. Dictation (B), 15 hours, Miss MacConnell.
- S33b. Study of Material in the Grammar Grades, 15 hours, Mr. Scales.
- S30c. High School Music, 15 hours, Dr. Rix.
- S31c. Harmony (A), 15 hours, Principal Tapper.
- S32c. Dictation (C), 15 hours, Miss MacConnell.
- S33c. Practice Teaching, 15 hours, Miss Dütting.
- S34c. Chorus, 15 hours, Dr. Rix.
- S40. Domestic Art, 60 hours, Mrs. Consalus.
- S41. Domestic Art (Hand Sewing), 30 hours, Mrs. Consalus.
- S42. Domestic Art (Dressmaking), 60 hours, Miss Close.
- S43. Costume Designing, 30 hours, Miss Close.
- S44. Basketry, 30 hours, Mrs. Consalus.
- S50. School Gardens, 60 hours, Mr. Parsons.
- S60. Domestic Science (First Year Courses), 60 hours, Miss Gearing.
- S61. Domestic Science (Second Year Courses), 60 hours, Miss Christian and Miss Gearing.
- S62. Domestic Science (Third Year Courses), Miss Christian.
- S63. Domestic Science (Invalid Cookery), Miss Christian.

## II. COURSES PRIMARILY COLLEGIATE

### Latin

- S1. Vergil, 30 hours, Professor Sihler.
- S2. Latin Prose and Composition, 30 hours, Professor Sihler.
- S3. Collegiate Latin, 30 hours, Professor Sihler.

### Greek

- S1a. Elementary Greek, 30 hours, Professor Waters.
- S2. Homer, 30 hours, Professor Waters.
- S3. Greek Art, 30 hours, Professor Waters.
- S4. Greek History, 30 hours, Professor Waters.

**Semitics**

- SI. Beginners' Course in Hebrew, 30 hours, Dr. Eickman.
- S2. Intermediate Course in Hebrew, 30 hours, Dr. Eickman.
- SG3. Advanced Course in Hebrew, 30 hours, Professor Isaacs.
- S4. Biblical Aramaic Passages, 30 hours, Dr. Eickman.
- SG5. Targum on Genesis, 30 hours, Professor Isaacs.
- S6. Rabbinic Literature, 30 hours, Professor Isaacs.
- SG7. Mishna Sanhedrin, 30 hours, Professor Isaacs.

**English**

- SI. English Composition, 30 hours, Professor Bouton.
- S2. The Literature and Art of the Short Story, 30 hours, Professor Bouton.
- S3. History of English Literature, 30 hours, Professor Bouton.
- S4. American Literature, 30 hours, Professor Perry.
- SG5. English Poets of the Nineteenth Century, 60 hours, Professor Perry.

**German**

- SI. Beginner's Course, 30 hours, Professor McLouth.
- S2. Modern German Comedy, 30 hours, Professor McLouth.
- S3. Composition and Conversation, 30 hours, Professor McLouth.
- S4. Classical German Prose, 30 hours, Professor McLouth.

**French**

- SI. Elementary French, 30 hours, Dr. Delamarre.
- S2. Intermediate French, 30 hours, Dr. Delamarre.
- SG5. The Evolution of the French Novel in the XIXth Century, 60 hours, Dr. Delamarre.

**Spanish**

- SI. Beginner's Spanish, 30 hours, Mr. Iturralde.
- S2. Intermediate Spanish, 30 hours, Mr. Iturralde.
- S3. Advanced Course in Spanish, 30 hours, Mr. Iturralde.

**Italian**

- SI. Elementary Italian, 30 hours, Dr. Pugliatti.
- S2. Intermediate Italian, 30 hours, Dr. Pugliatti.
- S3. Advanced Italian, 30 hours, Dr. Pugliatti.

**Philosophy**

The following Courses announced as Courses Primarily Pedagogical may be taken for Collegiate credits:

- SG1. History of Education, 60 hours, Professor Horne.
- SG2. Seminar in History of Education, 30 hours, Professor Horne.
- S3. Introductory Psychology, 30 hours, Professor Lough.
- S4. Educational Psychology, 30 hours, Professor Lough.
- S6. Laboratory Psychology, 60 hours, Professor Lough and Dr. Radosavljevich.

### History and Political Science

- S1. Political and Constitutional History of the United States, 30 hours, Professor Brown.
- S2. American Civil Government, 30 hours, Professor Brown.
- S3. History of Europe in the XIXth Century, 30 hours, Dr. Jones.
- S4. The Economic History of England, 30 hours, Dr. Jones.
- SG1. Seminar in American Colonial History, 30 hours, Professor Brown.
- SG2. The French Revolution, 30 hours, Dr. Jones.

### Economics

- S1. Elements of Economics, 30 hours, Dr. Galloway.
- S2. Industrial History, 30 hours, Dr. Galloway.
- S3. Industrial Organization, 30 hours, Dr. Galloway.
- S4. Advanced Economics, 30 hours, Dr. Galloway.

### *At Washington Square*

- S5. Book-keeping Practice, 60 hours, Mr. Esquerre and Mr. Douglass.
- S6. Principles of Accounting, 60 hours, Mr. Esquerre and Mr. Douglass.

### Sociology

- S1. Principles of Sociology, 60 hours, Dr. Binder.
- SG2. Reform Movements and Field Course, 60 hours, Dr. Binder.

### Mathematics

- S1. Algebra, 30 hours, Professor Edmondson.
- S2. Solid Geometry, 30 hours, Mr. Thorne.
- S3. Trigonometry, 30 hours, Mr. Thorne.
- S4. Analytic Geometry, 30 hours, Professor Edmondson.
- S5. Differential Calculus, 30 hours, Mr. Thorne.
- S6. Integral Calculus, 30 hours, Mr. Thorne.

### Astronomy

- S1. Elementary Astronomy, 30 hours, Professor Edmondson.

### Physics

- S1. General Physics, 30 hours, Professor Hering.
- S2. Physics (Supplementary Course), 30 hours, Mr. Stevens.
- S4. Laboratory Course, 30 or 60 hours, Professor Hering and Mr. Stevens.
- S5. Advanced Laboratory Course, 30 or 60 hours, Professor Hering.

(For Lecture and Laboratory Course in High School Physics, see Courses Primarily Pedagogical, S9.)

### Chemistry

- S1. Introductory Lecture Course, 60 hours, Professor Hill.
- S2. Introductory Laboratory Course, 30 hours, Professor Hill.
- S3. Qualitative Analysis, 60 hours, Professor Simmons.
- S4. Quantitative Analysis, 60 hours, Professor Simmons.
- S5. Organic Chemistry, 60 hours, Professor Simmons.
- S6. Advanced Laboratory Practice, 30 or 60 hours, Professors Simmons and Hill.
- SG10. Research, 30 or 60 hours, Professors Simmons and Hill.

### Biology

- S1. General Zoology, 60 hours, Professor Bristol.
- S2. Comparative Anatomy, 60 hours, Professor Bristol.
- S3. Human Anatomy and Physiology, 30 hours, Professor Bristol.
- S5. Embryology, 60 hours, Dr. Bartelmez.

### Botany

- S1. Elementary Botany, 60 hours, Mr. Benedict.
- S2. Advanced Botany—Morphology, 30 hours, Mr. Benedict.
- S3. Advanced Botany—Physiology, 30 hours, Mr. Benedict.
- S4. Advanced Botany—General Laboratory and Methods, 30 hours, Mr. Benedict and Mr. Barbour.
- S5. Trees and Timbers, 30 hours, Mr. Benedict.

### Geography and Geology

- S1. Geography, 30 hours, Professor Woodman.
- S2. Geography of Commerce and Industry, 60 hours, Professor Woodman.
- S3. General Physiography and Geology, 60 hours, Professor Woodman.



Schedule of Hours of Lectures (*Continued*)

Hour: Mon. to Fri.	Courses Primarily Pedagogical.	Courses Primarily Collegiate.
11.30-12.30 P.M.	<ul style="list-style-type: none"> <li>¶History of Education.</li> <li>¶Seminar in Experimental Pedagogy.</li> <li>Methods of Model Teaching.</li> <li>¶Principles of Supervision.*</li> <li>¶Special Methods and Organization of Shop Work.</li> <li>‡Chorus.</li> <li>Domestic Art (Hand Sewing).</li> <li>¶School Gardens.</li> <li>¶Domestic Science (First Year Course).</li> <li>¶Domestic Science (Second Year Course).</li> </ul>	<ul style="list-style-type: none"> <li>Critical Biography of Cæsar.</li> <li>Aramaic.</li> <li>English Composition.</li> <li>Classical German Prose.</li> <li>¶Evolution of the French Novel.</li> <li>Advanced Spanish.</li> <li>Economic History of England.</li> <li>Seminar in American Colonial History.</li> <li>Advanced Economics.</li> <li>¶Reform Movements.</li> <li>Algebra.</li> <li>Integral Calculus.</li> <li>¶General Chemistry (Lab.)</li> <li>Human Anatomy.</li> </ul>
12.30-1.30 P.M.	<ul style="list-style-type: none"> <li>¶Methods of Teaching H. S. Physics.</li> <li>Seminar in Kindergarten Education.</li> <li>Domestic Art (Costume Designing).</li> </ul>	Elementary Greek.
2-3 P.M.	<ul style="list-style-type: none"> <li>¶Methods of Teaching H. S. Physics.</li> <li>Experimental Psychology.</li> <li>¶Laboratory Psychology.</li> <li>Program Making and Method in Kindergarten.</li> <li>¶Principles of Design.*</li> <li>¶Elementary Shop Work.</li> <li>‡Rote Songs and Dictation (A).</li> <li>‡Methods of Teaching Music in Grammar Grades.</li> <li>‡High School Music.</li> <li>Domestic Art (Basketry).</li> </ul>	<ul style="list-style-type: none"> <li>Homer.</li> <li>¶Qualitative Analysis.</li> <li>¶Quantitative Analysis.</li> </ul>
3-4 P.M.	<ul style="list-style-type: none"> <li>¶Laboratory Psychology.</li> <li>‡Kindergarten Techniques.</li> <li>¶Principles of Design.*</li> <li>¶Elementary Shop Work.</li> </ul>	<ul style="list-style-type: none"> <li>Greek Art.</li> <li>¶Laboratory Physics.</li> <li>¶Qualitative Analysis.</li> <li>¶Quantitative Analysis.</li> </ul>
4-5 P.M.	<ul style="list-style-type: none"> <li>Stories and Story Telling.</li> <li>Practice of Design.*</li> </ul>	<ul style="list-style-type: none"> <li>Greek History.</li> <li>¶Laboratory Physics.</li> </ul>

¶ Class meets for two consecutive hours.

\* These courses extend from July 5-July 26.

‡ These courses extend from July 26-August 15.

## DEPARTMENTS OF INSTRUCTION

### I.—Courses Primarily Pedagogical

#### S G1. History of Education

Language Hall, I,  
10.30—12.30

PROFESSOR HORNE

A general review of educational theory and practice in its historical development, with especial reference this summer to the Mediæval Period, will be undertaken in this course. There will be brief accounts of Primitive, Oriental, Jewish, Greek, and Roman education, followed by a more intensive study of the ecclesiastical education of the early Christian and Middle Ages, and ending with an outline of modern human, scientific, and social education. A practical aim running through the course will be to increase the efficiency of teachers through the application of the results of our study. Lectures, discussions, readings, and note-books. 60 hours.

#### S G2. Seminar in History of Education

Language Hall, I,  
9.30—10.30

PROFESSOR HORNE

The object of this course is to direct the research work of students engaged on some problem in the history of education. The problem may be one requiring an intensive treatment, in which case it should fall within the field of modern education; or it may be one requiring an extensive treatment, in which case it should be a contemporary educational problem to be treated in the light of the history of education. The lectures of the instructor will illustrate the latter type of treatment, using as problems such topics as educational faith, discipline, status of the teacher, general method, etc. Lectures, written reports, and a final essay summarizing results of investigation. 30 hours.

#### S3. Introductory Psychology

Language Hall, I,  
9.30—10.30

PROFESSOR LOUGH

An introduction to the systematic study of psychology. The course will begin with a description of the nervous system, its structural and functional organization, and its significance as a physical

basis for a study of mental phenomena. This will be followed by a careful study of the more important facts of normal mental life—attention, perception, memory, reasoning, emotion, volition, etc. Simple psychological experiments will be performed by the class.

#### **S4. Educational Psychology**

Language Hall, I,

10.30—11.30

PROFESSOR LOUGH

The lectures present a special study of those topics in psychology which have the most important bearing on the theories and practice of education. The course will include a study of the typical forms of mental activity in school children; the natural and artificial conditions determining the development of those mental activities; the psychological foundations of various principles of teaching; and the educational value of the studies of the typical curriculum.

#### **S5. Principles of Education**

Language Hall, II,

8.30—10.30

DISTRICT SUPERINTENDENT JOSEPH S. TAYLOR

This course discusses the broad principles of teaching in their historic relation and with reference to current educational theory and practice. Among the topics thus considered are these: interest; apperception; correlation; the muscular sense in teaching; inductive, deductive, and Socratic methods; the hygiene of instruction. Specific application of these and other principles is made to the following subjects: reading; spelling and the meaning of words; composition; history; geography; nature study and elementary science; arithmetic; penmanship; drawing and manual training; the study period. Discipline and class management are also discussed. A special feature of the course is the writing of papers on assigned topics. Many people know subjects well enough, who nevertheless fail in examinations because they lack the skill to record what they know with proper brevity, emphasis, and perspective. The papers submitted are returned to the writers with detailed criticisms. Those who do not expect credit for the course may be excused from the written exercises. Those who desire to take the course should provide themselves with Reports of the Committee of Ten and Committee of Fifteen (Secy. N. E. A., Winona, Minn.), DeGarmo's "Herbart and the Herbartians" (Scribners), Taylor's "Art of Class Management" and "Composition" (A. S. Barnes & Co.) and "Word Study" (Ed. Pub. Co.).

**S6. Laboratory Psychology**Language Hall, I,  
2—4

PROFESSOR LOUGH AND DR. RADOSAVLJEVICH

This course is intended to give extended practice in the technique and methods of normal individual experimental psychology. Many problems of differential psychology will be verified by actual daily systematic experiments in the classroom, especially those experiments which are connected with the learning of various materials, habit formation, thinking processes and conclusions, æsthetic and moral judgments. The results of all such investigations will be discussed by the entire class, and compared with the critical study of similar results in the present experimental psychology. There will be a few lectures and reports on tabulating such experimental data. The course will conclude with a few lectures on the present problems in experimental psychology.

**S G7. Experimental Psychology**Language Hall, I,  
2—3

PROFESSOR LOUGH AND DR. RADOSAVLJEVICH

This course is intended to give extended practice in the technique of experimental psychology. The membership of the class will be limited. The topics to be studied will be determined after consultation with the class. Each student will be assigned a special topic for experimental investigation, and the results of all such investigations will be discussed by the entire class. Students desiring to take this course should confer with the instructors either in person or in writing before June 15th.

**S G8. Seminar in Experimental  
Pedagogy**Politics Seminar Room,  
10.30-12.30

DR. RADOSAVLJEVICH

This is a seminar course for the report and discussion of most recent results of the original scientific investigation of special problems that are of practical value to teachers in their classroom work, as well as of scientific value to experimental pedagogy. Special attention will be given to those experimental statistical studies of school children which refer to their static and dynamic abilities in the school work, particularly in Reading, Writing, Arithmetic, Drawing and Nature Study. In connection with that there will be a few lectures on the history, aims, materials or data, methods and conclusions in studying pupil's psychological nature as shown in these school subjects.

Experimental investigations of general intelligence of school chil-

dren, as represented by the Meumann-Shern School and Binet-Simon School, and compared with the present tendencies in promoting and grading pupils. There will be also a few lectures on tabulating the data of experimental-statistical data connected with experimental pedagogy and experimental didactics.

**S9. Methods of Teaching High School Physics,** Butler Hall,  
Laboratory Course 1-3

PROFESSOR HERING AND MR. STEVENS

This course offers opportunity for performing those experiments usually demanded in preparation for college. The method employed and the apparatus used are of approved preparatory school type.

The course will be credited in the School of Pedagogy as a method course, but will not be credited in other departments of the University.

**S10. Methods of Teaching Modern** Germanic Seminar Room,  
**Foreign Languages** Library Building,

DR. MONTESER

10.30-11.30

Lectures, reports, and discussions. The aim of the course will be to acquaint the teacher of French or German in elementary or high schools with the modern methods of teaching these languages, as they have been developed in Germany and other European countries within the last twenty-five years, and to show the adaptation of these methods to American conditions. Some of the topics treated will be: The aim in teaching modern languages, the teaching of pronunciation, of grammar and syntax, the building up of a vocabulary, the reading of texts, the value of translation from the foreign language and vice versa, the choice of literature, the use of objects and pictures, oral work, composition without translation, the proper use of text-books, etc.

Model lessons will be given by the lecturer and by different members of the class, and some of the commonly used grammars, readers, and texts will be examined and criticised.

**S11. Methods of Model Teaching**

Language Hall, I,  
11.30-12.30

DR. EDMUND

This course will discuss the training of teachers for positions as critic teachers or model teachers in training schools and normal colleges and as primary supervisors. The following topics will be

some of those considered: The function of the critic teacher in pedagogical training. Special preparation required for the critic teacher. The twofold character of the critic teacher's class, and the consequent modification of the relation of teacher to pupil. The relation of critic teachers to practice teachers. How to bring out weak and strong points. Methods of criticism. Types of teachers, and their adaptation to the work of teaching. Criteria of good teaching. The welfare and advancement of the novitiate in teaching.

**S12. Methods in English for Elementary Schools** Language Hall, I,  
10.30-11.30

DR. EDMUND

A study of the typical forms of literature, illustrating narration, description, exposition, and argument; the choice and presentation of material for oral and written composition; the requisites in good composition; means of making criticism effective; methods of teaching sentence-forms, parts of speech and analysis of sentences.

Text-books recommended: Writing in English, Maxwell and Smith, School Grammar, Maxwell—American Book Co.; Longmans' Grammar, edited by Dr. Smith—Longmans, Green & Co.

**S13. The Vocal and Literary Interpretation, of Shakespeare** Language Hall, I,  
9.30—10.30

DR. EDMUND

The principles studied in Course S14, Reading and Dramatic Interpretation, will have practical application in this course.

Scenes from various plays will be studied and interpreted through voice, facial expression and gesture. The following plays will be studied in regard to the action, the character, the dramatic motives and situations: The Midsummer Night's Dream, Romeo and Juliet, As you Like It, Twelfth Night, Merchant of Venice, Julius Cæsar, Hamlet, Macbeth and The Tempest.

Text recommended: The Temple Shakespeare, David McKay, Philadelphia.

**S14. Reading and Dramatic Interpretation** Language Hall, I,  
8.30—9.30

DR. EDMUND

Reading in primary, grammar and high schools. The function of the teacher as an interpreter of literature to the children. Literature suitable for silent and oral reading in the elementary and high schools. Methods to be used in teaching children to read. How to

secure best results from silent reading. A study of the action of the imagination in the vocal interpretation of literature. The fundamental principles involved in the correct use of voice and body in oral reading and speaking. The manifestation of the dramatic instinct in children. The educative value of dramatic performances in school. The writing, telling and dramatization of stories for children. Illustrative selections from standard literature studied and rendered. The course is designed to aid all teachers and students who use the voice as a medium of communication in the schoolroom or on the public platform.

## DEPARTMENT OF KINDERGARTEN EDUCATION

MISS HARRIETTE MELISSA MILLS,

PRINCIPAL OF THE DEPARTMENT

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MISS MILLS

(Principal of Kindergarten School, affiliated with New York University)

*Seminar in Kindergarten Education*

*Kindergarten Program and Methods, Games, and Kindergarten Gifts and Occupations*

DR. JENNY B. MERRILL

(Formerly Director of Kindergartens in the Boroughs of Manhattan, The Bronx, and Richmond, New York City)

*Seminar in Kindergarten Education*

MISS MAUD LINDSAY

(Sheffield, Alabama. Author of "Mother Stories")

*Instructor in Stories and the Art of Story Telling*

MISS ELSIE A. MERRIMAN

(Director of Music in Kindergarten Training School, affiliated with New York University)

*Instructor in Music for the Kindergarten*

## GENERAL STATEMENT

The Summer School of the University offers in its session of 1911 six courses in Kindergarten Education. With the exception of the music for the kindergarten, each course will continue during the entire six weeks of the session.

Advanced courses given by Dr. Merrill and Miss Mills are planned for school superintendents, kindergarten and primary supervisors, training teachers and kindergarten teachers of experience who wish to extend their knowledge of the kindergarten in its relationship to the general school system. These courses may be taken for University credit.

The elementary courses offered are for students who wish to pursue regular lines of kindergarten work, or to review such courses for the inspiration they may afford. These courses, amounting to 90 hours, may be taken for credit toward the Regular Training Course, given during the University year.

**Sl5. Program Making and Method in the Kindergarten** Language Hall, I,  
2—3

MISS MILLS

I. Program Making: The aim of this course will be to help the student to realize the universality of the educational principles that must be adapted to the needs of childhood. The course will include (a) a discussion of the basic elements in the course of study or program for the kindergarten; (b) a comparative and critical study of published and unpublished programs; (c) practical work in program-making involving the selection and evaluation of subject matter and its arrangement with a view to establishing proportion in kindergarten practice.

II. Method: The aim will be to determine (a) the plans of action that will render the program effective; (b) study of characteristic modes of child activities—comparison of Froebel's classification with that of modern psychology; (c) the purpose of the exercise plan in the kindergarten.

**Sl6. Kindergarten Technique** Language Hall, I,  
3—4

MISS MILLS

This course will consider the regular sequence of materials for the kindergarten through the Building Gift Series; the reading and discussion of Froebel's *Pedagogics of the Kindergarten*; a rapid survey of the traditional occupations; the modifications of kindergarten techniques; educational use of toys; educational use of Nature materials. This is a laboratory course. Material fee, \$2.00.

**Sl7. Kindergarten Songs, Rhythms and Games** Language Hall, I,  
Time to be arranged

MISS MERRIMAN AND MISS MILLS

This course will present the theory and practice of music in its bearing on child development. It will include the selection and arrangement of songs, rhythms, and games into series that follow the normal development of child powers.

(30 hours during the last three weeks of the session, beginning July 26.)

**Sl8. Stories and Story Telling**Language Hall, I,  
4—5

MISS LINDSAY

This course will consider stories from many practical standpoints which will be illustrated by story telling. Some of the special topics to be treated are the following: The story teller and his art; The place and purpose of the story in the education of the child; What constitutes a good story—from a literary standpoint; from an ethical standpoint; from the view-point of the child; The story and the environment; The story classified—fairy stories; ideal stories; moral stories; religious stories; nature stories; humorous stories; old versus new stories; The graded story; Odds and ends about story telling. Every student is required to do practice work in story-telling.

**Sl9. The Content and Meaning of  
Friedrich Froebel's Mother Play**Politics Seminar Room,  
9.30-10.30

MISS MILLS

This course is planned for the instruction of those who wish a more complete understanding of Froebel's "Mutter und Kose Lieder" as (a) an expression of Froebel's philosophy of education; (b) its value in the training of teachers; (c) its value in the training of children. This course consists of thirty lectures, discussions, and collateral readings. It is intended for advanced students, but may be taken by students desiring the study for general culture.

**S20. Seminar in Kindergarten Education**Language Hall, I,  
1—2

DR. MERRILL AND MISS MILLS

This course is intended for students who are prepared to do advanced work. It will include the study of the most important factors involved in the relationship of the kindergarten to the general educational system. Some of the special topics to be treated are the following: Organization, cost of equipment and maintenance of kindergartens; essentials in the training of kindergarten and primary teachers; advantages and disadvantages of one supervisor for kindergarten and primary grades; standards for entrance and promotion; standards of discipline; distinctive features of kindergarten; standards of judgment of kindergarten teacher's work; the kindergarten program and its relationship to elementary course of study; the validity of criticism; the best kindergarten guide books.

**S21. Children's Books and Reading**

Butler Hall,

MR. MOSES

10.30—11.30

The development of children's literature is traced from the early 15th century to the present day. The social forces affecting its growth will be discussed as well as the modifications due on the one hand to educational theories, and on the other to the broadening of the sphere of women. Lectures will be delivered: (1) on individual authors, such as La Fontaine, Perrault, "Mother Goose," compilers and editors of *The New England Primer*; Newbery, the first publisher of children's books; Isaiah Thomas, the first American publisher, etc.; (2) on the distinctive forms of literature for children, such as biography, poetry, fairy tales, legends; in this connection the story hour will be fully treated; (3) on the economic production and social distribution of juvenile books, which phase will include a discussion of children's reading from the practical standpoint of the publisher, and in its relation to the library, the school, and the home; (4) on the problem of book selection for children in its special educational phases and in its cultural aspects. Important library lists and school recommendations will be examined and discussed, and collateral reading will be done throughout the course, based on bibliographical material furnished the student. This course is strongly recommended to kindergartners, since it deals with a phase of their work largely neglected—a first-hand acquaintance with the best literature for children, beginning with the youngest years of school training.

**S22. Public Health**

Language Hall, I,

DR. HOAG

8.30—9.30

The first four weeks of this course will consist of lectures on the laws of health. Laboratory work will be arranged for the last two weeks. Field excursions to public institutions of the city.

**S23. School Hygiene**

Language Hall, I,

DR. HOAG

9.30—11.30

The first four weeks of the course will consist of lectures on the growth and development of the child; the defects and disorders of children in the order of their commonest occurrence; home health in relation to school health; the health of teachers; contagious diseases of school children; sanitation. The last two weeks of the session will consist of a laboratory study of defective children, tests of sight, hearing, condition of the teeth, heart and lungs. A study of nutrition will be made.

## DEPARTMENT OF MANUAL ARTS

JAMES PARTON HANEY, B.S., M.D.

DIRECTOR OF THE DEPARTMENT

*Lecturer on Principles of Supervision and on Principles and Practice of Design*

ALBERT WILSON GARRITT, B.S.

*Instructor in Elementary and Advanced Shop Work*

## GENERAL STATEMENT

The Summer School of the University offers in the sessions of 1911 four courses in the Manual Arts, two of which are given by Dr. Haney and the others under his immediate direction.

Dr. Haney's courses will be given *in the first three weeks of the session* (from July 5th to July 26th). The other courses will be six weeks in length (from July 5th to August 15th).

The first course given by Dr. Haney is a double course in the Principles of Supervision (30 hours) for Supervisors of the Manual Arts, combined with the course (30 hours) in the Principles of Design.

The second course offers the lectures (30 hours) in Principles of Design, combined with the course in Practice of Design. The latter includes two personal criticisms daily, together with practical work upon patterns for application to a variety of materials available for school work in the crafts. Excellent studio facilities are offered to students in this course.

N. B. Attention is called to the fact that the courses in Principles of Supervision and Principles of Design will not be offered in 1912. The purpose of the department is to change certain of its courses from year to year that those desirous of undertaking continuous advanced study may have the opportunity offered to them.

The fees for the various courses are as follows:

I*	{Principles of Supervision, 30 hours Public Speaking (10 lectures, optional)}	Dr. Haney	\$30.00
II	{Principles of Design, 30 hours Practice of Design, 30 hours}	Dr. Haney	\$30.00
III	Elementary Shop Work, 60 hours	Mr. Garritt	\$25.00 (Including Material Fee)
	Special Methods, 60 hours		
	Organization and Methods, 18 hours		
IV	Advanced Shop Work, 60 hours	Mr. Garritt	\$25.00 (Including Material Fee)
	Special Methods, 60 hours		
	Organization and Methods, 18 hours		

\* Each group of subjects forms one course.

### Supplementary Lectures, Free to all Students

During the sessions a number of evening lectures and conferences will be given by Dr. Haney. These will discuss important phases of art teaching and supervision and will offer varied programmes in which members of the class will participate. This will offer opportunity for all to profit by the wide professional experience of those in attendance. Several illustrated travel talks will be given by Dr. Haney, who will also arrange to visit the Metropolitan Museum with members of the class during the session.

#### S24. Principles of Supervision and Methods of Teaching the Manual Arts

Havemeyer Hall,  
10.30-12.30

This course is offered in combination with the course in Principles of Design.

DR. HANEY

Three weeks, July 5-26

The course in Supervision consists of thirty lectures, two of which will be given each day. The underlying principles of the arts will first be considered together with the general principles of methods, applicable to all forms of hand training. Each art will be treated as a co-ordinate element in a general course of study, and means will be indicated for securing individual work on the part of both teacher and pupil. Questions of materials, techniques and lesson steps will be reviewed for both primary and grammar grades, and standards of execution will be shown through exhibitions of a variety of children's work.

Following the lectures on methods of teaching, a number of periods will be given to a consideration of questions of supervision. These will include the topics noted in the synopsis which follows, each topic being presented in detail, with many suggestions regarding the organization and development of work in city and country schools. A synopsis of the course follows:

1. The General Problems of Supervision. Four phases of study: Subject, child, methods and administration.
2. The rise of the arts. Review of their history.
3. The teachings of genetic psychology as affecting instruction in the arts. Stages of child growth.
4. Instincts and interests of childhood. Nature's curriculum.
5. The arts as educational agents. The arts as socializing agents.
6. A general analysis of the different activities which may be developed in the elementary school.
7. Essentials of method.
8. Drawing in the lower grades.
9. Drawing in the higher grades. Development of technical skill.
10. Mechanical drawing. Relation to various forms of constructive work.
11. Constructive work in elementary grades. Relation to other school exercises.
12. Constructive work in the higher grades. Individual work.
13. Development of models in response to school needs.
14. Design in the lower grades. Relation to children's interests and to school needs.
15. Design in the intermediate grades. Development in connection with constructive work.
16. Design in the higher grades. Use of conventionalized matter.
17. Organization of the course of study.
18. Development of course for higher grades.
19. The

business of supervision. Elements of successful supervision. 20. Personal elements in supervision. Supervisor's decalog. 21. Study of school system. Study of individual school. 22. Preparation of illustrative material. Organizing to secure co-operation. 23. Development of work. 24. Class visits and criticism. 25. Record keeping. General and special records. 26. Conferences. A type plan for any conference. 27. Exhibitions of work. Methods of organizing and exploiting. 28. Special problems. Supervisory work under untoward conditions. 29. Reports. Material and preparation of annual reports. 30. Contributions to professional literature, their nature and preparation.

**Public Speaking:** Ten lessons will be given by Dr. Haney in this course which offers practice in the preparation and presentation of written and extemporaneous addresses. This instruction will prove of great value to those called upon to address teachers' meetings or other gatherings. *Open to all students in Principles of Supervision without fee.*

## S25. Principles of Design

Havemeyer Hall,

This course of thirty lectures is offered in combination with the course in Principles of Supervision or with the course in Practice of Design.

DR. HANEY

2-4

Three weeks, July 5-26

These lectures offer in sequence the principles of design and the essentials of color harmony. Throughout they will be very fully illustrated by large chalk drawings in color, made before the class, and by other illustrations in the form of Japanese prints, photographs, plates and examples of applied design in various materials. A large number of practical problems will be solved by the lecturer, methods and devices being illustrated in connection with each problem. The notes of these lectures form a complete series of chapters, elaborately illustrated and covering all phases of classroom practice. A synopsis of the course follows:

1. The nature of design. Elements which condition all applied designs.
2. Line and its function. 3. Mass. Planning and refining masses. 4. Interest, and its creation in line and mass. Development of complicated masses.
5. Structure in free and architectural decorations. 6. Decorations as related to function of form. Decorations violating structure. 7. Structural decorations of various spaces. 8. Development of strength, simplicity and interest. 9. General nature of conventionalization. Decorative aspects of natural forms.
10. Decorative details of natural forms. 11. Development of interesting and consistent variety throughout unit. 12. Conventionalization of details. 13. Adaptation of forms to fill various spaces. 14. Development of derived forms. Variants in line and in structure. 15. Adaptation of pattern to material. 16. Various materials discussed, with the changes necessary to adapt a given pattern to each. 17. Symbolism in design. 18. Emotion in design. 19. Style, the personal element in design. 20. Class-room practice in design. Development of a course of study. 21. Forms of illustrative material. Steps in development of a class problem. 22. Tone, its study in neutrals. Scale of tones. 23. Relation of spectrum to tonal scale. 24. Color intensity. 25. Color scales of reduced intensity and of reduced value. 26. Development of chart of reduced intensities. 27. The principles of color harmony. 28. Color schemes and their development. 29. Devices for harmonizing crude color schemes. 30. Methods of teaching color harmony.

**S26. Practice of Design**

Green Laboratory,

9.30-10.30. 4-5

This course is offered only in combination with the course in Principles of Design.

DR. HANEY

Three weeks, July 5-26

This course offers special instruction and two daily criticisms in the preparation and application of designs to different materials. It covers thirty periods of class-room instruction, fifteen of these being given in the morning and fifteen in the afternoon. Additional hours are required in practical work in the studio. This offers admirable accommodations for a large class. It is provided with individual and conveniently appointed work tables on the ground floor of a very well lighted building.

Each student will prepare a number of patterns suitable to the materials most available for school work in applied decoration. The various problems will be easily adaptable to elementary and high-school work, and will include patterns for stencils, block-printing, etched metal, repoussé, leather work, etc.

Especial attention will be given to the decorative study of plant forms from living specimens, and their development later as conventional elements. Students in this course provide their own brushes and other materials. A synopsis of the course follows:

1. Drawing natural flowers—Determination of decorative aspect. 2. Study of decorative line. 3. Adjustment of proportions. 4. Principles of conventionalization. 5. Adaptation—Development of variants. 6. Pen-and-ink technique—Design for tail-piece. 7. Mass arrangements—Development of masses. 8. Agglutination—Use of Decorative line—Outlining. 9. Design for wood-block—Analysis of wood-block patterns. 10. Development of typical wood-block units. 11. Treatment of conventional units. 12. End paper stamps, all-over patterns, borders, etc. 13. Study of stencil patterns. 14. Adaptation of natural forms to stencil units. 15. Planning stencils for various purposes. 16. Completion of stencil designs for repeats, borders, etc. 17. Designs in pierced metal—Study of material. 18. Technical processes in simple jewelry. 19. Adaptation of decorative forms to metal designs. 20. Development of various patterns for copper and silver. 21. Leather and the process of tooling. 22. Planning designs for belts, purses, book-covers, etc. 23. Adaptation of units for leather tooling. 24. Completion of leather designs for various purposes—Use of color. 25. Appliqué—Nature of process—Motifs suitable. 26. Designs planned for cushions, curtains, table covers, etc. 27. Development of conventional elements. 28. Study of color and methods of finishing appliqué designs. 29. Class-room methods—Practice of craft-work. 30. Illustrative material, its nature and preparation.

**S27. Elementary Shop Work**

Shop,

2-4

Included in this course are the courses in Special Methods and in Organization of Shop Work.

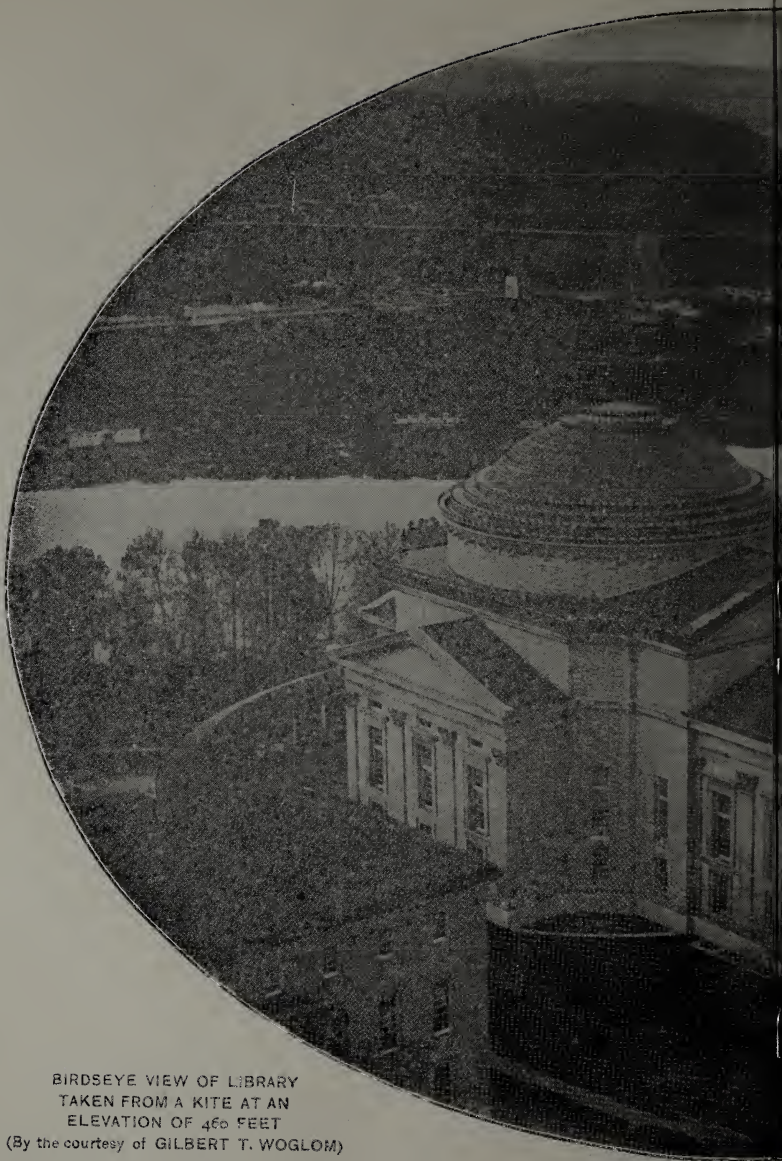
MR. GARRITT

Six weeks, July 5-August 15

This course is especially designed to inform grade teachers and



CAMPUS VIEWS



BIRDSEYE VIEW OF LIBRARY  
TAKEN FROM A KITE AT AN  
ELEVATION OF 460 FEET  
(By the courtesy of GILBERT T. WOGLOM)

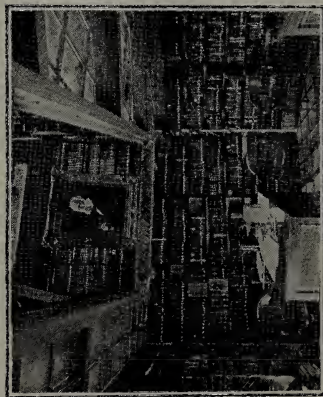


SHOWING THE  
HARLEM, THE HUDSON  
AND THE PALISADES

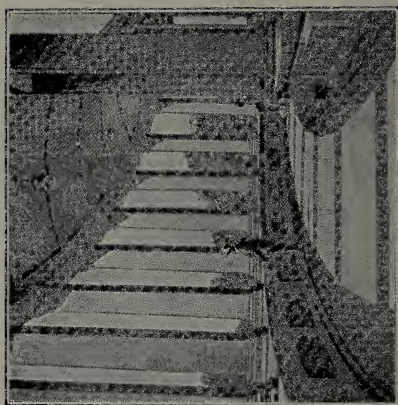


HALL OF FAME AND LIBRARY LANGUAGE HALL BUTLER HALL

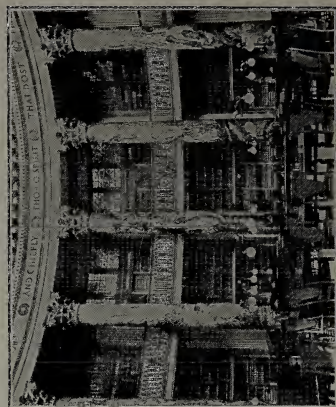
SOUTH HALL WEST HALL



GERMANIC SEMINAR ROOM



HALL OF FAME



READING ROOM

others called upon to give instruction in woodwork in schools with small equipments; it is particularly valuable to instructors in rural schools and to teachers of classes of backward pupils.

The first three weeks will be given to the construction of models developed with the use of knife, saw and hammer. A variety of useful forms will be made, each model being related to the needs of the school and the interests of the pupils.

In the latter half of the course the work will be arranged to meet the requirements of the student, along one of the following lines:

1. Elementary Furniture Construction.
2. Work for Classes of Defectives.
3. The Decoration of Models by Simple Carving.
4. Work for Rural Schools with Limited Equipments.
5. Toy Making.

*(Two units of credit.)*

## **S28. Advanced Shop Work**

Shop,  
8.30-10.30

Included in this course are the courses in Special Methods and in Organization of Shop Work.

MR. GARRITT

Six weeks, July 5-August 15

This course is designed for teachers and supervisors of shop work. It places its emphasis on the organization and development of woodwork in elementary and high schools, and will consider the development of woodwork along the lines of industrial instruction.

The course offers a study of construction and includes:

1. Qualities and characters of woods.
2. Construction in wood as determined by the material.
3. Principles of furniture designing.

A number of typical forms will be designed and constructed, including: 1. Box. 2. Panel. 3. Drawer. 4. Table. 5. Chair, etc.

*(Two units of credit.)*

## **S29. Special Methods and Organization of Shop Work**

Shop,  
Daily, 10.30-12.30  
Mon., Wed., Fri., 4-5

These courses are given in combination either with the course in Elementary or in Advanced Shop Work.

MR. GARRITT

Six weeks, July 5-August 15

**Special Methods:** Thirty lessons on Methods of Teaching classes in KNIFE WORK, COPING SAW WORK and MECHANICAL

**DRAWING.** A large number of drawings will be furnished in connection with the constructive exercises and methods of relating the different subjects to other school activities will be explained. The **MECHANICAL DRAWING** will teach class-room methods of making and reading working-sketches of simple models.

**Organization and Methods of Teaching:** Eighteen lessons on the Organization and Equipment of School Shops and on Methods of Teaching. Tool lists, with cost, will be furnished and class and school organization explained. General methods will be discussed with recommendations relative to the planning of Courses of Study and the development of instruction on tools and materials. This discussion will include the making of Mechanical forms, Science and Nature Study models; also the making of molds for cement work. Several of the forms referred to will be made by the class.

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## Department of Music

July 26 to August 15, 1911

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THOMAS TAPPER, PRINCIPAL OF THE DEPARTMENT

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THOMAS TAPPER

(Lecturer at New York University)

(Lecturer and Instructor in Music, Institute of Musical Art, N. Y. City)

*Constructive Music. Melody Writing, Elementary and Advanced  
Harmony*

FRANK R. RIX, M.D.

(Director of Music, New York City Schools)

*Chorus Conductors, Lecturer on High School Music*

MISS FRANCES DÜTTING

(Instructor in Music, Normal College, N. Y. City)

*Elementary and Advanced Methods and Practice Teaching*

BURTON T. SCALES, M.A.

(Director of Music, Penn Charter School, Philadelphia)

*Material and Sight Reading*

MISS M. F. MACCONNELL

(Of the New York City Schools)

*Rote Songs and Dictation*

## GENERAL STATEMENT

*The courses in music will be given this year only during the last three weeks of the Summer School, beginning July 26th.*

The courses in music afford to all engaged in public or private music instruction an opportunity to study the subject in its application to public education. It appeals directly to the Music Director, the Principal, the Superintendent and the Grade Teacher. The course of study, while primarily arranged to aid those who are professionally active in Public School work, is no less valuable to the private music teacher.

The recent admission of music to the list of credit subjects for College Entrance Examination, and its consequent admission as a Credit Course in the High Schools, finds Superintendents and Principals of High Schools prepared to grant Credit Markings for music study pursued with the private teacher. This action practically makes the private music teacher a factor in Public School work, and he should therefore become intimately acquainted with the nature of music as a Public School study, with the bibliography of the subject, and with the extent of the work accomplished in the Primary, Grammar, and High School grades. The teacher can then take up private music study with the High School student in a manner consistent with the general demands of the curriculum.

Payment of a fee of \$15 entitles the student to five one hour courses, including Chorus in this department, daily for three weeks. Students of this department, paying the \$15 fee, who desire to pursue one or more courses in other departments of the Summer School, may do so upon payment of a fee of \$5 for each lecture course of one hour daily for three weeks, provided the course is one which students may enter for the second half of the term.

The work for the Music Department extends over three years.

The work for the First Year, with four recitations daily, includes :

1. Study of Material used in the Primary Grades.
2. Methods as applied to Primary Grades.
3. Sight Reading—the essential principles of scales, keys, meter and rhythm.
4. The study of Rote Songs and Elementary Dictation.

The work of the Second Year Class embraces four recitations :

1. Study of Material through the Grammar Grades.
2. Methods as applied to the Grammar Grades, with a review of Primary Methods.

3. Melody Writing.
4. Dictation as applied to Grammar Grades.

Students of the Third Year Class have four recitations daily, as follows :

1. Methods in High School Music.
2. Elementary Harmony.
3. Advanced Dictation.
4. Practice Teaching.

All students of the School are required to participate in the Chorus Recitation.

An examination is held at the end of the Session for students of each of the three classes, and a certificate is granted those who pass the examination with the required percentage.

### COURSES FOR FIRST YEAR STUDENTS

#### **S30a. Rote Songs and Dictation A 2.00**

MISS MACCONNELL

The purpose of the Rote Song in the primary grades is fully considered. Methods of presentation, including study of the poems and of the music. Rote Songs, with and without instrumental accompaniment.

The bibliography of the subject is studied, and a definite vocabulary of Rote Songs is acquired. Elementary Dictation forms an important part of this course.

#### **S31a. Study of Material in the Primary Grades 8.45**

MR. SCALES

This course provides intimate acquaintance with the best presentation of the subject of Public School Music in books and charts. The material for the primary grades is analyzed in detail. The method of preparing and presenting a lesson is explained. Instruction and suggestions are given in schoolroom methods, devices of presentation, purpose and relation of songs and studies, arrangement of the music programme for the year, term, month and week. Some practice in reading and interpretation is included in this course.

#### **S32a. Methods of Teaching Music in Primary Grades 9.30**

MISS DÜTTING

The consideration of the pedagogic principles underlying the teaching of music in the Primary Grades. The work takes up the study of

the Scale, Simple Intervals, Simple Chromatics, provides practice in the interpretation of these idioms, and detailed outlines for lesson preparation are suggested.

**S33a. Sight Singing and Notation****10.30****MR. SCALES**

This recitation requires the systematic reading throughout the session of graded material, aiming to give the student actual practice in the notation of music, in the application of words and syllables to music, and the consideration of all the problems which underlie the art of music reading.

**COURSES FOR SECOND YEAR STUDENTS****S30b. Melody Writing****10.30****PRINCIPAL TAPPER**

The art of melodic invention. Analysis and construction of melody in the Phrase and Period forms ; in major and in minor. The required daily written work gives practice in rhythmic forms ; in the various chromatic inflections (without modulation); in definite modulation to nearly related keys.

This course is invaluable to the supervisors and grade teachers who need to supplement the Sight Reading material of the textbook with original exercises.

It is further valuable to the teacher who desires to include in the music course the cultivation of the creative impulse, permitting children to gain greater facility in music reading through music writing.

Daily written work is required.

**S31b. Methods of Teaching Music in Grammar Grades****2.00****MISS DÜTTING**

A consideration of the pedagogic principles underlying teaching of music in the grammar grades.

The work takes up the pedagogic principles, with illustrations from

books and charts, and supplies detailed outlines for lesson preparation and presentation.

**S32b. Dictation (B)**

8.45

MISS MACCONNELL

This course in Ear Training and Dictation is intended to make the student familiar with scale relations, simple chromatic inflections, and the simpler rhythms. It thus becomes of direct value, both in sight reading and in listening to music.

Dictation (B) develops the subject to the extent that it is applied in the first five grades, and provides special lessons in showing how to prepare and present dictation lessons in the class-room.

**S33b. Study of Material in the Grammar Grades**

9.30

MR. SCALES

This course provides intimate acquaintance with the best presentation of the subject of Public School Music in books and charts. The material for the Grammar Grades is analyzed in detail. The method of preparing and presenting a lesson is explained. Instruction and suggestions are given in schoolroom methods, devices of presentation, purpose and relation of songs and studies, arrangement of the music programme for the year, term, month and week. Some practice in reading and interpretation is included in this course.

**COURSES FOR THIRD YEAR STUDENTS**

**S30c. High School Music**

2.00

DR. RIX

The larger forms of choral music are studied.

The principal topics of instruction in this course are test, arrangement and distribution of voices, programmes for the High School music recitation, Supplementary Music, the relation of High School music to the grades, and its place as a credit study in the curriculum.

**S31c. Harmony (A)**

9.30

PRINCIPAL TAPPER

This is a practical course in music writing and analysis.

The analysis of melodies, on scale and chord basis, and the art of writing for four voices form the subject of daily lessons, for which

considerable written work is demanded. The course in Harmony (A) takes up the analysis and construction of music to the Secondary Seventh Chords.

This course is indispensable to the proper reading and interpretation of part music. Particular attention is given to the leading of voices, sequences, cadences, and the simpler modulations.

### **S32c. Dictation (C)**

10.30

MISS MACCONNELL

See Dictation (A) for general statement.

Dictation (C) considers the subject as it is applied in the upper grammar grades and to the High School classes. The preparation and presentation of the lesson is carefully considered. Relation of Dictation to music writing (melody and chord progression).

Outline lessons applicable in the grammar grades are provided, and suggestions for further study are given.

### **S33c. Practice Teaching**

8.45

MISS DÜTTING

The students of this course demonstrate their understanding of the principles of school music in a lesson given to a class under the supervision of the instructor, Miss Dütting.

The presentation of the lesson, its relation to what the pupil has already acquired, the text to be studied, and the principles to be illustrated by original blackboard work, form the basis of the lesson.

### **S34c. Chorus**

Auditorium,

11.30

DR. RIX

One hour daily is devoted to this important subject. It is not a period of recreation or uninstructional song singing, but a series of valuable lessons in the technical and interpretative elements of choral music. The possibilities of the school chorus are thoroughly investigated, methods are exemplified, applied and explained. The most suitable material for use in Grammar, High, and Normal Schools is fully discussed

## DEPARTMENT OF DOMESTIC ART

MISS CLOSE, Director

Instructors: MISS JANE G. CLOSE, } Supervisory Teachers in  
 MRS. FRANCES CONSALUS, } Public Schools of Manhattan.

The Department of Domestic Art, offering courses in the Summer School and at Washington Square during the collegiate year, has been created to meet the needs of teachers who desire to give instruction in this subject, which includes Cord and Raffia Construction Work, Weaving, Basketry, Sewing, Drafting, Costume Designing and Garment-making.

These classes are intended to fit teachers for special work, either in the day or night schools; but they are open to all who desire to add this subject to their general pedagogical equipment. The instruction will include methods of teaching, as well as technical work. The Summer School will give a certificate upon the satisfactory completion of any of the courses. Credit will be given by the Board of Examiners of the New York City Schools for the courses in Domestic Art, and certificates for these courses will be accepted in lieu of one year's professional training in the case of teachers holding License No. 1. Persons desiring to take courses in this Department are requested to notify the Director of the Summer School of their intention before June 1st, in order that material may be purchased. A complete set of models, such as are used in the New York public schools, will be made and may be retained by each student in the course.

### S40. Domestic Art

MRS. CONSALUS

Association Hall,

9.30-11.30

This course, which is suitable for kindergarten and primary grades, includes instruction in cord and raffia work, weaving, chair caning and simple basketry. The technical instruction will be supplemented by lectures on Manual Training and Methods of Teaching. Blackboard illustrations will form a part of each lesson. Fee for materials, \$3.00.

### S41. Domestic Art—Hand Sewing

MRS. CONSALUS

Association Hall,

11.30-12.30

A graded course of instruction in sewing, pattern drafting and garment-making, as taught in elementary schools, will be presented. Blackboard illustration of stitches and methods of teaching are included in the schedule. Fee for materials, \$3.00.

- S42. Domestic Art—Dressmaking** Association Hall,  
MISS CLOSE 9.30-11.30

This course includes instruction in machine sewing, drafting, crinoline modeling and dressmaking, and is designed to prepare teachers for the evening and high schools. Fee for materials, \$3.00.

- S43. Costume Designing** Association Hall,  
MISS CLOSE 12.30-1.30

This course includes sketching of costumes in pencil and water-color, and is recommended to students in connection with S42 Domestic Art, to which the work is directly applied. Fee for materials, \$3.00.

- S44. Basketry** Association Hall,  
MRS. CONSALUS 2-3

The aim of this course will be to make the student familiar with the various styles of woven and coiled basketry. The history of the designs in Indian baskets will be studied. Fee for materials, \$4.00.

## DEPARTMENT OF SCHOOL GARDENS

HENRY GRISCOM PARSONS, Director

- S50. Methods of Preparing and** University Gardens,  
**Conducting Gardens for the** 9.30-12.30  
**Education of Children**

The course is designed to prepare teachers to take charge of or teach in children's gardens.

The course consists of lecture and laboratory periods. The lectures take up the theory and practice of the work; the laying out and planting of the garden; soil, plant, and fertility problems; methods of handling children in gardens, and social features connected therewith. The needs of different localities are considered. Attention is given to insect life and methods of presenting it to children. The laboratory period is spent in the workshop and garden, where the students do all the practical details of the actual work. In the workshop the students are shown how to use simple material in experiments suitable to the garden and class-room. In the garden each student plants and cares for a model child's plot, and during the course performs all the elementary steps of garden making.

The gift of the Schwab estate to the University places at the disposal of this department the fine old gardens as well as other parts of the large property. The work will be carried on, therefore, under ideal conditions. (60 hours' credit)

There are three large children's gardens in operation within easy reach of the University, each presenting a different phase of the work. Opportunity will be made to visit these gardens.

The New York Public Library and the Department of Agriculture at Washington supply a selected list of suitable books and pamphlets for the use of this class.

## DEPARTMENT OF DOMESTIC SCIENCE

MISS M. KATHERINE CHRISTIAN, Director of the Department  
*Instructor in Home Cookery and Table Service, Sanitation, Dietetics,  
and Invalid Cookery*

MISS MARY E. GEARING  
(Supervisor of Domestic Science in the Public Schools of  
Houston, Texas)  
*Instructor in Foods and General Cookery and Domestic Laundering*

MISS ANNA L. REUTINGER  
(Assistant Superintendent of Nurses in the New York Hospital)  
*Instructor in First Aid to the Injured and Home Care of the Sick*

These courses are offered for the instruction of those who wish to teach domestic science, but are open to any others who may desire to add to their general culture. The complete course is planned to cover three years of study, but a certificate will be granted for the satisfactory completion of one or more year's work with a statement of the hours and scope of any student's work. Methods of teaching will be discussed throughout. A high school education or its equivalent is required for admission.

Students while on duty in the laboratory are requested to wear plain white shirt waists, skirts of walking length, and white aprons.

### S60. First Year Courses

Havemeyer Laboratory,  
8.30-12.30

*A—Foods and General Cookery: Lectures, Recitations and Laboratory Work*  
(8.30-11.30)

MISS GEARING

This course is a consideration of foodstuffs with reference to composition, nutritive value and cost; their selection, care and preservation; the underlying principles of their preparation for food, with supplementary laboratory work in the analysis of the typical foods as an illustration of these principles. The physiology of

digestion is reviewed and simple experiments in artificial digestion performed. Menus are planned and simple meals prepared and served.

*B—Domestic Laundering: Lectures and Laboratory Work*

MISS GEARING (11.30-12.30)

The equipment and care of the laundry. The principles and practical processes of the family laundry, including the laundering of bed, body and table linen; colored fabrics and flannels; laces, silks, and embroideries; the preservation of colors; removal of stains; the use and abuse of aids in the laundry.

**S61. Second Year Courses**

Havemeyer Laboratory,  
8.30-12.30

*A—Home Cookery and Table Service: Lectures, Discussions, and Laboratory Work* (8.30-11.30)

MISS CHRISTIAN and MISS GEARING

This is a course in advanced cookery with special study of proper food combinations; the preparation and serving of meals. The market conditions will be considered with reference to wise selection and economic purchase of the materials used.

*B—Sanitation: Lectures and Inspection of Plumbing, Heating, Lighting, Ventilating, and Refrigerating Plants* 11.30-12.30

MISS CHRISTIAN

Care of the home and its furnishings; the water supply, plumbing, lighting, heating, ventilation, refrigeration, vacuum cleaning, destruction of household pests, sanitary cleaning, sunlight and fresh air.

**S62. Third Year Courses**

Havemeyer Laboratory,  
Hours to be arranged

*A—Dietetics: Lectures, Discussions, and Laboratory Work*

MISS CHRISTIAN

In view of the increased cost of living, this course is offered as an opportunity for the intensive study of the nutritive value of foods in relation to their cost. The fundamental laws of human nutrition and the functions in the body of the various food principles are reviewed. Standard dietaries are studied. The principles thus evolved are applied in the planning of practical and well-balanced dietaries for individuals and groups under varying physiological

and economic conditions. This involves a consideration of market prices in different localities and includes the planning of dietaries for infants and children; for the sick and the aged; and for families of different incomes, with the weight of attention given to those of limited means.

*B—First Aid to the Injured and Home Care of the Sick: Lectures and Laboratory Work*

MISS REUTINGER

The sick room: Location, furnishing, care, bed-making, duties of nurse; taking the temperature, respiration; methods of keeping charts and other data for the physician. First aid: Treatment of burns, cuts, bruises, shock; antidotes for poisons. Bandages: Kinds and methods of applying.

**S63. Invalid Cookery**

Havemeyer Laboratory,  
Hours to be arranged

MISS CHRISTIAN

This is a special course for nurses in training schools. It deals with the relation of diet to disease; the dietetic treatment of anemia, scurvy, rickets, gout, rheumatism, constipation, etc.; the preparation of foods for the sick, including broths, gruels, jellies, custards and other egg preparations, scraped beef, broiled meats, toast, etc.

Special rates will be made for classes from hospitals.

## II.—Courses Primarily Collegiate

### LATIN

**S1. Vergil**

Latin Seminar Room,  
Library Building,

PROFESSOR SIHLER

9.30-10.30

One lecture on his life. Another on the plan of his national Epic. Readings from the first six books. Study of his syntax and vocabulary. Practice in Hexameter. (Special guidance for those who propose to teach Vergil, with conferences in Latin Seminar; Servius and Conington.)

**S2. Latin Prose**

Language Hall, III,

PROFESSOR SIHLER

10.30-11.30

Daily exercises, beginning with the more idiomatic syntactical features of Latin: *cum, si, oratio obliqua*. (Ramsay.) *Oral Latin*: Quizzing on the contents of simple prose writers.

**S3. Critical Biography of Cæsar**

PROFESSOR SIHLER

Language Hall, III,

11.30-12.30

Dr. Sihler's recent work, with readings from Cicero, Dio, Plutarch, Suetonius, and critical study of the entire period from Sulla to the Ides of March.

**GREEK****S1a. Elementary Greek**

PROFESSOR WATERS

Language Hall, I,

12.30-1.30

This course carries the student over the essentials of Greek grammar, emphasizing the most important inflection, mode and tense forms. The method is entirely inductive; as fast as inflectional forms are met, they are placed in their proper categories in diagrams and charts prepared and amplified by the student as he progresses in the course. Word lists of the most frequently recurring words are made and their relation with words in other languages are carefully noted in order to impress their meanings permanently. The course is meant to be of value to teachers of other languages, who should have at least some knowledge of Greek.

As a rule, it is advisable that the student have a good preparation in Latin grammar.

The text used is Xenophon's *Anabasis*.

**S2. Homer**

PROFESSOR WATERS

Language Hall, I,

2-3

The course is largely pre-collegiate; it is based upon a knowledge of the essentials of Attic inflection, and a good wording vocabulary. The main object is to understand the peculiarities of the Homeric dialect, and to enable the student, whether pupil or teacher, to read selected passages in the *Iliad* and the *Odyssey*. The course will be partly collegiate also, in that parts of *Herodotus* and some lyric poetry will be used for study, in other variations from Attic forms, notable mixed Ionic and Æotic.

The principal text-book will be Homer's *Iliad*.

**S3. Greek Art**

PROFESSOR WATERS

Language Hall, I,

3-4

The course takes advantage of the fact that Greek art has had a lasting and beneficial influence upon modern art, and is intended to carry the student over the history of the subject, starting with discoveries in Crete and coming down to the Roman Imperial period.

The University is in possession of a large number of illustrated works touching on all the divisions of Greek art. A number of visits to the Metropolitan Museum will be planned.

The text-book used is Fowler and Wheeler's *Greek Archaeology*.

#### **S4. Greek History**

Language Hall, I,

PROFESSOR WATERS

4-5

This course will start with the rise of the Eastern Nations and trace their contact with the Greeks of Asia Minor, the rise of Greek governments, the colonization of the Mediterranean basin, the history of Continental Greece, the conquest of the Far East by Alexander, and the outcome of Greek relations with Rome and the Orient in the Hellenistic period. In view of the influence which the literature, philosophy, and religion of Greece have had upon all later periods, the course is expected to be of value to students of general history.

The text-book will be Bury's *History of Greece*.

### **SEMITIC LANGUAGES**

#### **Hebrew**

##### **S1. Beginners' Course**

Hebrew Seminar Room,  
Library Building,

DR. EICKMANN

9.30-10.30

Elementary Grammar. Translation of easy Biblical passages.

##### **S2. Intermediate Course**

Hebrew Seminar Room,  
Library Building,

DR. EICKMANN

10.30-11.30

Selections from Pentateuch and historical books. Thorough grammar.

##### **SG3. Advanced Course**

Washington Square,

PROFESSOR ISAACS

2-3

Special reference to the needs of teachers. Readings from Psalms and Prophets. Introduction to comparative Semitic Grammar.

#### **Aramaic**

##### **S4. Biblical Aramaic Passages—Elementary Grammar**

Hebrew Seminar Room, Library Building,

DR. EICKMANN

11.30-12.30

- SG5. Targum on Genesis—Selections** Washington Square,  
 PROFESSOR ISAACS 3-4

### Rabbinic

- S6. Rabbinic Literature to Close of Mishna** Washington Square,  
 PROFESSOR ISAACS 4-5

- SG7. Mishna Sanhedrin** Washington Square,  
 Time to be arranged  
 PROFESSOR ISAACS

### ENGLISH

- S1. English Composition** Language Hall, III,  
 PROFESSOR BOUTON 11.30-12.30

An inductive study of prose style, with the view of formulating the principles of English composition as embodied in structure and present usage. The course aims to give the student correctness, freedom, and vitality of expression. Two or three themes are written weekly. Individual criticism of all written work is an essential feature of the course.

- S2. The Literature and Art of the Short Story** Language Hall, III,  
 10.30-11.30  
 PROFESSOR BOUTON

On its literary side this course involves study of the principles of the art of fiction as applied to the short story. Through readings, lectures and discussions, the work of the following writers will receive particular study: Poe, Hawthorne, Turgenieff, Tolstoi, De Maupassant, Bret Harte, Stevenson, Henry James, and Kipling.

The course will be so conducted that those of the class who so elect may do practical work in the writing of short stories. Two stories will be written during the session by each student so electing. This work will receive individual criticism and discussion.

- S3. History of English Literature** Language Hall, III,  
 9.30-10.30  
 PROFESSOR BOUTON

A view of the progress of English Literature from its beginnings in Old English to the nineteenth century, with a presentation of its chief facts in perspective and proportion.

**S4. American Literature**Language Hall, III,  
10.30-11.30

PROFESSOR PERRY

A study of American Literature, both prose and poetry. The first part of the course consists in lectures on the early colonial writers. Wendell and Greenough's *American Literature* is used as a text-book and a considerable amount of outside reading is required.

**SG5. English Poets of the Nineteenth Century**Language Hall, III,  
8.30-10.30

PROFESSOR PERRY

This course consists of lectures, biographical and critical, together with assigned readings. It includes a study of Wordsworth, Coleridge, Byron, Shelley, Keats, Tennyson and other poets of the period.

**GERMAN****S1. Beginners Course**Language Hall, III,  
8.30-9.30

PROFESSOR McLOUTH

The work in this course will comprise a rapid survey of the important parts of the grammar, the reading of some easy and interesting stories, and as much practice in conversation as the time allows. Text-book: Bierwirth's *Beginning German*. It will prepare students for Course 2 of the Washington Square Collegiate Division the following autumn.

**S2. Modern German Comedy**Language Hall, III,  
9.30-10.30

PROFESSOR McLOUTH

Modern German comedy with easy exercises for translation into German. Benedix' *Die Hochzeitreise* and Freytag's *Die Journalisten* will be read and discussed, and a portion of Harris's German composition will be studied. The elementary principles of German grammar will be rapidly reviewed, and some attention paid to the syntax of the cases and moods. Lectures upon the German customs and manners will be given as occasion requires. As far as practicable the German language will be used by the instructor in the class-room exercises, although a speaking knowledge of the language on the part of the pupil is not necessary. This will lead to Course 5 in the Washington Square Collegiate Division.

**Course S3. Composition and Conversation** Language Hall, III

This course will only be given provided a sufficient number of students report promptly for it.

**Course S4. Classical German Prose** Language Hall, III,  
11.30-12.30

PROFESSOR McLOUTH

The reading of selections from the most interesting parts of Goethe's autobiography (*Dichtung und Wahrheit*), and the study of syntax. Lectures on the history of German literature.

**FRENCH****S1. Elementary Course** Language Hall, II,  
8.30-9.30

DR. DELAMARRE

This course is intended for those who have no previous knowledge of French. The aim kept in view will be to enable the student to acquire a correct pronunciation in the reading of French prose, and through daily practice to understand simple French when spoken. The essentials of grammar, illustrated with copious exercises, will be reviewed. Reading will begin with the first lesson.

Text-books: Fraser and Squair, *French Grammar* (Abridged Edition, D. C. Heath & Co.); Syms' *Easy French Reader* (American Book Co.).

**S2. Intermediate Course** Language Hall, II,  
9.30-10.30

DR. DELAMARRE

This course is intended for students who have taken the Elementary Course or its equivalent. The study of the French Syntax, with easy exercises in composition, will be a distinct feature of this course, while the reading of the works of eminent French writers in prose and of dramatists will afford ample opportunity for conversation. The medium of instruction will be the French language so far as possible.

Text-books: François, *Introductory French Composition* (American Book Co.); Augier and Sandeau, *Le Gendre de M. Poirier* (American Book Co.); Fraser and Squair, *French Grammar* (D. C. Heath & Co.).

**SG5. The Evolution of the French Novel in Language Hall, II,  
the Nineteenth Century** 10.30-12.30

DR. DELAMARRE

The various kinds of novels, autobiographical, idealistic, realistic, historical, psychological, etc., will be carefully studied, with particular reference to influences. An analytical study of the most famous novels will set forth the characteristics of each kind. Students will receive a typewritten summary of the lectures, which will be used as a topic for discussion.

**SPANISH**

**S1. Elementary Spanish**

Romance Seminar Room,  
9.30-10.30

MR. ITURRALDE

This course, which is intended for those who have no knowledge of Spanish, aims to give students an opportunity to learn to speak, to read and to write this language. Attention will be paid to the rudiments of grammar. Conversation in Spanish, in which every member of the class takes part, from the very beginning, is a feature of the course. This text-book will be used: L. A. Loiseaux, *Elementary Grammar of the Spanish Language* (Silver, Burdett & Co.).

**S2. Intermediate Spanish**

Romance Seminar Room,  
10.30-11.30

MR. ITURRALDE

The work of this course will consist of dictation, conversation, principles of grammar and prose composition.

These text-books will be used: Hills' and Ford's *Grammar* (D. C. Heath & Co.), and Ford's *Exercises in Spanish Conversation*.

**S3. Advanced Spanish**

Romance Seminar Room,  
11.30-12.30

MR. ITURRALDE

The student who takes this course is expected to possess a fair speaking knowledge of the language. The work of this course will consist in the writing of themes and letters and in the study of modern authors.

These following works will be studied: Valera (*Pepita Jimenez*); Galdós' *Marianela*; Valdés' *El Capitan Ribot*; Emilia Pardo Bazan, *Un viaje de novios*; Blasco Ibanez, *La Catedral*; and Pereda, *Pedro Sanchez*.

## ITALIAN

- S1. Elementary Course** Washington Square,  
DR. PUGLIATTI 2-3

This course is intended for those who have no previous knowledge of Italian. The work will consist of easy reading, conversation and grammar: *Manzoni I promessi Sposi*, *De Amicis Spagna*.

- S2. Intermediate Course** Washington Square,  
DR. PUGLIATTI 3-4

A course in advanced reading, conversation and grammar, for students who have the equivalent of S1: *Manzoni I promessi Sposi*, *Goldoni, Commedie*, Grandgent's *Italian Grammar*.

- S3. Advanced Course** Washington Square,  
DR. PUGLIATTI 4-5

*De Amicis Pagine Sparse*, *Dante's Divina Commedia*.

## HISTORY AND POLITICAL SCIENCE

- S1. Political and Constitutional History** Language Hall, III,  
of the United States 9.30-10.30

PROFESSOR BROWN

Prefaced by an account of the Colonial System and of the condition of the Colonies in the middle of the eighteenth century, this course extends from the outbreak of the French and Indian War through the Period of Reconstruction. Its aim is to explain the origin and development of the Constitution and institutions of the United States. A general survey of the field of American history is given. Special attention is paid to the right perspective of events and their proper relation to the great movements of our history. The course is designed to meet the needs of teachers of American history in secondary schools, and is similar to the course given in the University College. Text-books for the course are Hart's *Formation of the Union* and Wilson's *Division and Reunion* (Longmans).

- S2. American Civil Government** Language Hall, III,  
10.30-11.30

PROFESSOR BROWN

The aim of this course is to give a thorough grounding in the science of civics, and thus enable the student to obtain a knowledge of the structure and practical operation of American government,

federal, state and municipal, that will meet the needs of teachers of American history and civics and that will insure an intelligent appreciation of the rights and obligations of citizenship.

The course will deal with the principles governing the nature of the federal government and of its relations to state government; with the structure, practical working, and interrelation of the three coördinate departments of federal and state government; and finally, with the forms of local government. Special stress will be laid upon municipal government under this last topic, and a comparison of American and European forms of municipal government will be given. Text-book: Bryce's *American Commonwealth*, abridged edition (The Macmillan Co.).

**S3. History of Europe in the Nineteenth Century** Language Hall, III,  
8.30-9.30

DR. JONES

This course will cover in some detail the political history of Europe from the fall of Napoleon until the present time. The instruction will be by means of lectures and collateral reading. In the first few lectures the internal history of the principal continental states since 1815 will be treated; but particular attention will be paid to the events of the last fifty years.

During the second half the aim of the course will be to give a sketch of international politics during the last few decades, especially from the point of view of the expansion of the so-called "world powers" beyond the limits of Europe. Attention will therefore be given to the partition of Africa and to the opening up of Asia. The course will close with a discussion of the state of European politics at the present day, centering about the rivalry of England and Germany.

**S4. Economic History of England** Language Hall, III,  
11.30-12.30

DR. JONES

At the outset a survey will be made of the economic and social conditions in England during the later Middle Ages. The history of agriculture, industry, and commerce in the succeeding periods down to the Industrial Revolution of the late eighteenth century will be treated in some detail. Lastly, the outlines of English economic history since that Revolution will be presented, and such topics as the economic aspects of the Napoleonic régime, Cobden and free trade, labor legislation and social reform, and the recrudescence

of protectionism in the last few years will be discussed. The instruction is by lectures and collateral reading.

**SG1. Seminar in American History**

History Seminar,  
Library Building,

PROFESSOR BROWN

11.30-12.30

A research course in American history for graduate students. The work of this course will consist of instruction and practice in the use of sources, methods of investigation and preparation of reports upon assigned topics. It is expected that History SG 2 will be taken in conjunction with this course. The two courses together will count as one full course in history in the Graduate School.

**SG2. History of the French Revolution**

Language Hall, II,

DR. JONES

10.30-11.30

This course is designed for graduate students, and the instruction will be by means of lectures, practice in the use of sources, and reports upon assigned topics of reading. It will open with a discussion of the condition of France under the *ancien régime*, of the feudal abuses, and of the protests of the philosophers. The political, social, economic and religious aspects of the Revolution will all be considered in some detail. The course aims to bring the history of the movement down to its completion in the year 1799.

NOTE.—This course is open only to graduate students taking SG1 and credit for one full course in history in the Graduate School will be given for the two courses.

## ECONOMICS

**S1. Elements of Economics**

Economic Seminar Room,  
8.30-9.30

DR. GALLOWAY

The reasoning which led up to the current conclusions regarding rent, wages, value, interest and money will be worked out, and, so far as time will allow, the application of economic theory to present day problems will be discussed. The course is designed to give students a clear understanding of the most important economic laws. Seager's *Introduction to Economics* and Marshall's *Principles of Economics* will be used for supplementary reading.

**S2. Industrial History**

Economic Seminar Room,  
10.30-11.30

DR. GALLOWAY

The purpose of this course is to trace the industrial development of the great commercial and trading nations. Emphasis will be put upon the causes that have given England, Germany and America their industrial prominence. Attempts will also be made to discover the economic motives behind great historical events which have hitherto been given a military or political significance only.

Such topics as the following will suggest the character of the work:

The history of industrial methods, with discussions of the principal factors which gave to each method its own peculiarity.

The development of the modern forms of ownership and control, the joint stock company, the trust, the holding company, etc.

Ancient and Mediæval commerce and the economic significance of the direct steamship line and the transcontinental railway in modern times.

History of the great inventions and their part in the industrial revolution.

Economic motives determining old and new colonial policies.

A comparative study of the growth of the cotton, wool, steel and iron and farming industries of Great Britain, Germany, France, and the United States.

Other topics will be considered, if time permits, such as the history of banking and credit institutions, co-operation in Europe and America, the struggle between factory method of mass production and the small workshop.

**S3. Industrial Organization**

Economic Seminar Room,  
9.30-10.30

DR. GALLOWAY

This course will cover the technique of trade and the practical side of economic relations. In discussing the problems of organization the point of view taken will be that of the industrial manager and organizer. Business institutions and the leading industrial tendencies will be studied.

The labor problem, departmental arrangement, systems of cost keeping, duties of directors, rights of stockholders, methods of capitalization and price of policies will be discussed in their bearing upon business policy.

Industrial organization as applied to the business of farming, manufacturing, transportation and exchange will be studied.

Some of the special features of this course will be the study of the stock and produce exchanges, organized methods of buying and selling, the importance of advertising.

**S4. Advanced Economics**

Economic Seminar Room,

11.30-12.30

DR. GALLOWAY

This course is meant for those who have taken a course in elementary economics. The various theories under the subject of distribution will be critically analyzed. Special attention will be given to the subjects of monopoly, speculation, transportation, panics, money and credit, tariff, labor, trade unionism, socialism, etc. Such questions as the following will be treated: Is there evidence to show that a monopoly price can be made profitable without consideration of the consumer? Should the profits of large corporations be limited by law? Is speculation a legitimate business? What effect does it have on the prices of wheat, cotton, etc.? Why do "Corners" fail? Is a railway company justified in making rates which discriminate between different markets? What constitutes "Stock Watering"? Are panics becoming more frequent? Will England be compelled to give up her free-trade policy? In general, this course will seek to test principles or laws of political economy by continual reference to practical experience.

**S5. Bookkeeping Practice**

Washington Square,

4.45-6.30

MR. ESQUERRE AND MR. DOUGLASS

This course is intended for students who have not had sufficient practical bookkeeping experience to take university work in accounting to advantage. No university credit will be allowed for the course to students who take more than 120 hours in accounting.

The work includes the theory and practice of bookkeeping. Lectures covering the theory are supplemented by laboratory practice in the framing of journal entries, writing up books of original entry, posting, taking off trial balances and closing the books.

**S6. Principles of Accounting**

Washington Square,

4.45-6.30

MR. ESQUERRE AND MR. DOUGLASS

The aim of this course is to give the student a thorough education in the fundamental principles of accounting. The work consists of lectures on theory supplemented by laboratory work. The lectures

on theory are so arranged as to develop the subject logically and make clear to the student not only the relation of the various topics of this subject, but the relation of accounting to allied subjects, such as economics, law, finance, etc.

The laboratory feature of the course requires the student to work out a most complete and comprehensive series of transactions following the outlines of theory. The books used for this purpose are of standard size and identical with the most up-to-date books now in use. They begin with the accounts of the sole proprietor, whose books are kept by single entry; the change from single to double entry is made; the books are subsequently changed from a cash to an actual basis; the sole proprietor from simple trading goes into manufacturing; he takes in a special partner, who later becomes a general partner; a participation in the profits is sold to a third party; the original proprietor retires; his place is taken by a new partner; the other partner dies; the remaining partners incorporate; new and up-to-date methods are introduced; a simple cost system is installed; goods are shipped and likewise received on consignment; the corporation gets into financial difficulties and a receiver is appointed, who requires statements of affairs and deficiency; new capital is secured by an issue of bonds; the bonds contain a sinking fund clause, which provides for their redemption; the corporation is subsequently taken over by a holding company in a transaction in which "fictitious" good-will is involved; the burden of paying dividends on an excessive capitalization becomes too great; dividends are passed; the company defaults on its bond interest and is finally liquidated by the holding company, which issues a statement of realization and liquidation to the minority stockholders.

## SOCIOLOGY

### **SR. Elements of Sociology**

Philosophy Seminar Room,

8.30-10.30

DR. BINDER

The fundamental principles underlying society; the forces and motives of socialization; the methods of efficiency; the laws and causes of progress.

### **SG2. Reform Movements and Field Course**

Philosophy Seminar Room,

10.30-12.30

DR. BINDER

Modern charity: Organized and unorganized philanthropy; various ways of approaching poverty; delinquency and degeneracy. Woman

and child labor: treatment of prisoners; children's courts; women's rights; institutions of social reform.

This course is intended to acquaint students, both theoretically and practically, with the methods of administering various forms of philanthropy, charity, institutional work, care of prisoners, management of immigrants, etc.

New York City furnishes an unusual opportunity for acquaintance with every possible form of work for the betterment of society. Last year eighteen different institutions were visited in connection with the course, *e.g.*, Ellis Island, the Alms House on Blackwell's Island, the Catholic Protectory, the Jewish Orphan Asylum, the Maternity Hospital, etc.

This course is primarily for undergraduates, but may be taken for credit by graduate students when supplemented by individual readings, investigations and reports.

## MATHEMATICS

### S1. Algebra

Language Hall, II,

11.30-12.30

PROFESSOR EDMONDSON

This course presupposes a knowledge of elementary algebra as far as quadratic equations. The course will include the theory of the quadratic equation, progressions, binomial theorem, permutations and combinations, partial fractions, determinants, and the theory of equations. The course is equivalent to the corresponding course in the University College and School of Applied Science, but is designed primarily for teachers who wish to prepare for a higher grade of work. Text-book: Hall & Knight's *Algebra for Colleges and Schools* (The Macmillan Co.).

### S2. Solid Geometry

Language Hall, II,

8.30-9.30

MR. THORNE

The preparation required for this course is plane geometry. The course will include the geometry of lines and planes in space, polyhedra, the cylinder, the cone, and the sphere. Text-book: Wentworth's *Solid Geometry* (American Book Co.).

### S3. Trigonometry

Language Hall, II,

9.30-10.30

MR. THORNE

An elementary course. The preparation required is a knowledge of plane geometry and algebra through quadratics. The trigonom-

etry, as well as the solid geometry, will be studied both for their practical applications, and as a preparation for the study of analytical geometry, the calculus, and the higher mathematics. The course will include the theory of logarithms. Text-book: Phillips & Strong's *Plane Trigonometry* (American Book Co.).

#### S4. Analytic Geometry

Language Hall, II

9.30-10.30

PROFESSOR EDMONDSON

All elementary course in analytic geometry of the line, circle, and conics. The preparation required is plane geometry, algebra (including the theory of quadratic equations), and plane trigonometry. The aim of the instruction is to make clear the principles underlying the application of algebraic analysis to geometry and to prepare the student for further study of analytic geometry and higher mathematics. Text-book: Ashton's *Analytic Geometry* (Scribner's).

#### S5. Differential Calculus

Language Hall, II,

10.30-11.30

MR. THORNE

An elementary course. The preparation required is higher algebra, plane trigonometry, and analytic geometry. This course and the next will serve as an introduction to the more thorough study of the calculus. The aim of the instruction is to make clear the fundamental ideas involved in the study of functions by applications to simple problems in geometry and mechanics. The course will include the derivation of the formulas for differentiation, expansion in series, evaluation of singular forms, maxima and minima of functions, tangents and normals, and curvature. Text-book: Osborne's *Calculus*. (D. C. Heath & Co.).

#### S6. Integral Calculus

Language Hall, II,

11.30-12.30

MR. THORNE

The preparation required for this course is differential calculus and its prerequisites. The course will include the derivation of the formulas for integration, the methods of integration of the more common types of functions, the determination of areas and lengths of curves, volumes of surfaces, centers of gravity, etc. Text-book: Osborne's *Calculus* (D. C. Heath & Co.).

## ASTRONOMY

### S1. Elementary Astronomy

Language Hall, II,

PROFESSOR EDMONDSON

10.30-11.30

General descriptive course, in which the subject is treated principally from the historical and physical side. Lectures and recitations. Text-book: Young's *Elements of Astronomy*.

This course will not be given unless elected by at least six students.

## PHYSICS

Butler Hall contains lecture rooms and laboratories equipped with all apparatus necessary for the regular college course. The laboratories will be open daily from 1 P.M. to 5 P.M. The laboratory work may be done in such periods as each student may arrange with the professor.

### S1. General Physics

Butler Hall,

9.30-10.30

PROFESSOR HERING

Experimental lectures. The ground covered by this course will embrace the most common and most significant features of physics. Particular attention will be devoted to the fundamental parts of the science, which will be presented in such a form as to show the correlation of the various branches in one science of energy.

This course is rich in experimental illustrations, and many of the demonstrations are designed to offer suggestions to teachers of the subject.

### S2. Physics, Supplementary Course

Butler Hall,

8.30-9.30

MR. STEVENS

A course supplementary to S1, consisting of text, lectures, problems, etc., in special portions of physics, will be given if there are several applicants for it.

### S4. Laboratory Course

Butler Hall,

1-3 or 3-5

PROFESSOR HERING AND MR. STEVENS

This is intended to give practice in qualitative and in quantitative work in general physics. The work will be mainly adapted to the

needs of those who already have a fair general knowledge of the subject. The exercises will not follow a definite order, as in the lecture course, but they will be numerous and varied. The exercises will be selected principally from the list of those taken by the students of the Undergraduate College, and will be so distributed as to give practice in mechanics, sound, heat, light and electricity. The course is equivalent to Course 5 or 6 of University College. Credit, hour for hour, 30 or 60 hours.

#### **S5. Advanced Laboratory Course**

Butler Hall,

PROFESSOR HERING

Arrangements for more advanced laboratory work in physics may be made by correspondence or consultation with the professor in charge. The exercises will be arranged to suit as far as possible the needs of individual students, whose reading in connection with the laboratory work will be directed by the professor. Credit as in S4.

(For methods in H. S. Physics, see Courses Primarily Pedagogical, S9.)

### **CHEMISTRY**

The chemical laboratory will be open to students from 9 A.M. to 5 P.M. daily, Saturdays included, during the session. Work in the laboratory courses can be done in the forenoons or afternoons, except where the hours are specified. Where possible, the hours for lectures and conferences will be arranged to suit the members of the classes.

#### **S1. General Chemistry, Introductory Lecture Course**

Havemeyer Laboratory,  
8.30-10.30

PROFESSOR HILL

This course constitutes an introduction to the study of Chemistry. No previous knowledge of the subject will be assumed. Particular attention will be paid to those features of the work which will be of assistance to prospective teachers of the subject. The course is designed to prepare students to meet successfully the recently changed requirements of the Board of Regents. It is recommended that those who take this course take also the Introductory Laboratory Course in General Chemistry (S2) at the same time.

The satisfactory completion of this course, together with half the course in Qualitative Analysis (S3), will be accepted by the Uni-

versity and Bellevue Medical College as meeting its new entrance requirements in Chemistry.

**S2. General Chemistry,** Havemeyer Laboratory,  
**Introductory Laboratory Course** 10.30-12.30

PROFESSOR HILL

This course is particularly designed to supplement the Introductory Lecture Course in General Chemistry (S1), but it may be taken by persons not enrolled in that course, provided they already possess an elementary theoretical knowledge of the subject.

The course is designed to illustrate and elucidate the fundamental principles of the science, to exemplify the simpler methods of chemical preparation and to develop the manipulative skill of the student. The inductive method will be followed as far as feasible, and this should furnish many valuable hints to prospective teachers of the subject.

**S3. Qualitative Analysis,** Havemeyer Laboratory,  
**Laboratory Course** 2-4, and two other hours

PROFESSOR SIMMONS

Laboratory course, with frequent conferences and quizzes on the chemical reactions involved and lecture demonstrations of the practical work. The presentation of a carefully kept note-book will be an essential part of the course.

The work will include the detection of the common metallic and acid radicals, following the methods of standard text-books. On completion of the course the student should be able to make a complete qualitative analysis of any mineral or inorganic technical product, soluble or insoluble.

Students desiring to elect the course must have completed a course in descriptive inorganic chemistry in some college or normal school, or, failing to present such credential, must be able to satisfy the instructor that they possess a fair general knowledge of that subject. The course will be made in work and examination equivalent to Chemistry 6 or 8 in the University College and School of Applied Science.

Half of this course (60 laboratory hours) may be taken in fulfillment of the requirement of laboratory work for admission to the University Medical College.

- S4. Quantitative Analysis,** Havemeyer Laboratory,  
**Laboratory Course** 2-4, and two other hours

PROFESSOR SIMMONS

The course will include certain preliminary exercises in the use of the balance, calibration of weights, flasks, and pipettes, and a series of exercises in gravimetric and volumetric analysis.

The completion of a course in qualitative analysis will be required for admission to the course. The work will be equivalent to Chemistry 7 in the University College and in the School of Applied Science.

- S5. Organic Chemistry,** Havemeyer Laboratory,  
**Laboratory Course** At least four hours daily

PROFESSOR SIMMONS

The course will be open to students possessing a knowledge of theoretical organic chemistry, and will include the synthesis of typical carbon compounds and a study of the more important reactions of organic chemistry.

- S6. Advanced Laboratory Practice** Havemeyer Laboratory,  
**Laboratory Course** At least four hours

PROFESSORS SIMMONS AND HILL

This course will involve the experimental investigation of special problems and will be open to any one who has taken S4 or its equivalent.

- SG10. Research Laboratory Course** Havemeyer Laboratory

PROFESSORS SIMMONS AND HILL

In addition to the regular courses above scheduled, students enrolled in the Graduate School or otherwise properly qualified students may pursue research work under the direction of Professor Hill or Professor Simmons. Credit will be given in the Graduate School for this work under the same restrictions as apply to similar work done during the regular sessions of that school.

## BIOLOGY

The Laboratory of Biology occupies the entire second floor of the Green Laboratory Building, is equipped with necessary microscopes and is supplied with abundant material for the work of this depart-

ment. The Laboratory will be open daily from 8.30 to 4. In all courses involving lectures and laboratory work, the lectures will be conducted at the time specified on the program, and the laboratory work may be done at such time as each student may arrange with the professor. Opportunity will be afforded for additional laboratory work whenever desired.

Courses S1, S2, and S5 are laboratory courses in which the usual laboratory fee is charged. The credit for each is two University hours. Course S3 is a lecture course, the credit for which is one hour.

### **S1. General Zoölogy**

Laboratory of Biology,  
PROFESSOR BRISTOL 8.30-9.30

An introduction to the subject. The course will follow the plan outlined in the Syllabus for Secondary Schools, Biologic Science, issued by the New York State Education Department, and will cover the sections from A to H, inclusive; that is, the invertebrate animals. It will comprise thirty lectures at the time noted above, and sixty hours of laboratory work, time to be arranged.

### **S2. Comparative Anatomy of Vertebrates** Laboratory of Biology, PROFESSOR BRISTOL 10.30-11.30

Intended primarily for students who have completed a Laboratory course in General Zoology. This course will cover sections I to M of the Syllabus mentioned above, or the vertebrate animals. It will comprise thirty lectures at the time noted above, and sixty hours of laboratory work, time to be arranged.

### **S3. Human Anatomy and Physiology** Laboratory of Biology, PROFESSOR BRISTOL 11.30-12.30

Text-book and Lectures. The aim in this course is to cover the essentials of the subject as laid down in the Syllabus referred to in Course S1, and to provide preparation for teaching the subject in the preparatory schools. The lectures will be fully illustrated by lantern slides, charts, models and demonstrations.

### **S5. Embryology** Laboratory of Biology, DR. BARTELMIZ 9.30-11.30

Intended for students who have a knowledge of general zoology and vertebrate anatomy. This course will take up the consideration of the germ cells, maturation, fertilization and cleavage, the forma-

tion of the germ layers, and the chief systems of organs derived from them. In the laboratory the work will include the study of mitosis, of types of invertebrate eggs and of certain stages in Amphibian and Avian development. It will comprise eighteen lectures and seventy-two hours of laboratory work.

## BOTANY

### **S1. Elementary Botany**

Green Laboratory,

Lecture, 9.30-10.30

Laboratory hours to be arranged

MR. BENEDICT AND MR. BARBOUR

This course is intended to cover the work outlined in Part I of the course prepared as standard by the Committee on Education of the Botanical Society of America. (See School Review, Nov., 1908.) It is designed to give the student a thorough understanding of the general relations of the subject of botany, and of the external and internal structure and the physiology of ordinary green plants. The course is offered for beginners in botany, and for teachers whose work in this subject was taken some time ago, and who are not familiar with present developments of the subject. There will be field work at the New York Botanical Garden once a week.

(Laboratory fee of \$5.00.)

### **S2. Advanced Botany: Morphology**

Green Laboratory,

Hours to be arranged

MR. BENEDICT

The work will be developed along the same lines as Course S3, but dealing with general plant morphology. This course will not be given in 1911 unless at least six students enroll for it.

### **S3. Advanced Botany: Physiology**

Green Laboratory,

8.30-9.30

MR. BENEDICT

A lecture and conference course in general plant physiology to follow the course outlined in the classic "Bonn text." (A text-book of Botany, Strasburger et al.) Besides the study of physiology, attention will be given to matters of content and presentation of a general elementary course, reference being made to a number of well-known elementary texts, and to Lloyd's Ganouge's pedagogical

texts. Laboratory study to accompany this course will be included in S4.

**S4. Advanced Botany: General Laboratory and Methods**      Green Laboratory,  
Hours to be arranged

MR. BENEDICT AND MR. BARBOUR

Designed to accompany Courses S2 and S3, and to give the student opportunity to study the actual structure of selected plant types, and to see the actual workings of various plant functions as shown by a series of typical experiments. In addition, the course will give the student an introduction to the methods of preparing demonstrations, including the simpler histological processes, i.e., section cutting, staining, etc.

(Laboratory fee of \$5.00.)

**S5. Trees and Timbers (Dendrology)**      Green Laboratory,  
Hours to be arranged

MR. BENEDICT

(Conferences, laboratory and field work, 30 hours)

This course is intended to introduce the student to a knowledge of the common trees of the vicinity, and of the common commercial woods. The course will include a taxonomic study, largely field work, of the native tree species, laboratory study of the internal structure of a selected type, and laboratory and other study of the building and furniture timbers most frequently met with in the trade. The course is intended for those who are interested in our common shade and forest trees, and who would like to become acquainted with them, and with the more important facts about them. It should prove useful to teachers of general botany, and especially to teachers interested in nature study. It is also adapted to the needs of engineering students.

## GEOGRAPHY AND GEOLOGY

**S1. Geography**

Geol. Lect. Room,  
10.30-11.30

PROFESSOR WOODMAN

(Lecture course)

This course is identical with D101 in the School of Pedagogy, and Geography 1 in the Collegiate Division. It comprises a scientific

discussion of those phases of advanced physical, commercial and political geography, a knowledge of which will aid teachers in elementary schools in presenting with greater clearness the elements of the subject which children below the high school can comprehend.

The general nature of the course is indicated by the following topics which, among others, will be specifically discussed.

How rivers make their valleys; how mountains waste away; the formation of peneplains and the meaning of cycles of erosion; Niagara Falls and its history; rock caves and their origins; natural bridges; how canyons are formed—Grand Canyon, Yosemite Valley; lakes—their history and their place in commerce; fjords and other harbors—history and characteristics of coast lines; the ice age and its effects upon man and his neighbors.

Heating and cooling the air; winds; formation of rain and snow; causes determining our daily weather; teaching children to use weather maps; how weather is predicted; climate and its bearing upon human activity.

The ocean—its extent, depth, bottom pressure, life at various depths; effect of the ocean and its currents upon climates; tides and their work; the continental shelf—its life, its relation to the history of the lands.

Relations between physical geography and commerce; what determines commercial centers and trade routes; factors in the greatness of New York, Boston, Philadelphia, Chicago, Minneapolis, Denver, New Orleans, San Francisco and other cities; inland water routes—their development and their uses; rail transportation.

The relations between physical geography and history, especially in North America.

The course will close with a study of the physical geography and geology of New York and vicinity.

Special teaching methods are not the main feature of the course, the object being to build a groundwork of knowledge upon which the pedagogic superstructure can later be erected, but attention will be turned to such subjects wherever possible. Those members of the class who are engaged in teaching should bring such text-books as they may have, in order that their methods and points of view may be compared.

The lectures are illustrated by maps, models, specimens and lantern slides. The text-book used is *Physiography*, by R. D. Salisbury (Henry Holt & Co.). Opportunity will be given to become acquainted with the literature of parts of the subject at first hand.

**S2. The Geography of Commerce and Industry**Geol. Lect. Room,  
8.30-10.30PROFESSOR WOODMAN  
(Lecture course)

This course is equivalent to Commerce 4 and 4a of the School of Commerce, and to course Geology 3 of the Collegiate Division. Its general theme is the dependence of mankind upon the earth's history. Among the topics treated are the following: agencies of existing change and their work; transportation—oceanic, coastwise, interior by water and by rail; mineral resources and their conservation; water for power irrigation; forests; land and its conservation; vegetable products; annual products; influences of environment upon man, and his adaptation to them; commerce and industry of the various countries.

The lectures are illustrated by maps, specimens and lantern slides. The text-book is *Physical and Commercial Geography*, by Gregory, Keller and Bishop (Ginn & Co.). Reference is made frequently to original literature, which will be at hand in the College Library.

**S3. General Physiography and Geology**Geol. Lect. Room,  
Tues. and Thurs. afternoons, and in part Saturdays

(Field course; counts as a 60-hour lecture course)

S3 is in part similar to Geology 3a of University College, but covers a wider range of phenomena.

The half-day excursions will be on Tuesday and Thursday afternoons; or, in the event of rain, on Saturdays; the all-day trips will be on Saturdays. In addition to the excursions, in-door meetings may be held on any of the above days, for preparation or discussion. Reports are required, and the grading of the work is largely upon them. The points of view of both branches of the subject will be kept in mind. The fundamental object of the work is to gain the power of discriminating observation, and the ability to arrange and sift data so as to arrive at legitimate conclusions. Teachers will find a camera useful in gathering illustrative material for future class work.

Some of the subjects illustrated in the field will be the processes of rain, river and wind action, and the forms produced by them; the results of weathering and of former ice action; the kinds and structures of rocks, with some of their mineral and fossil contents; the relations between the topography of the land and its causes; the effects of topography and distribution of land and water upon occupation and history in the New York district.

## Summary of University Statistics

1910-1911

DIVISIONS	Professors.	Lecturers.	Instructors.	Assistants.	Other Officers.	Total Officers.	Total Students.	Degrees Conferred, 1910.
I. ARTS AND SCIENCE.								
1. College of Arts and Pure Science . . .							199	15
2. School of Applied Science . . .							211	45
3. Graduate School. .							311	48
4. Summer School. .	35	44	18	6	14	117	529	
5. School of Pedagogy							345	15
6. Washington Square Collegiate Div. . .							357	36
7. School of Commerce.	6	19	11	6	4	46	1,182	69
II. LAW.								
8. University Law School . . . . .	9	1	4		1	15	688	193
9. Woman's Law Class.	1		3			4	53	
III. MEDICINE.								
10. University Medical College . . . . .	35	19	34	19	67	174	500	64
11. Veterinary College	11	2	1			14	15	5
IV. GENERAL								
12. Library . . . . .					7	7		
Grand Total . . .	97	85	71	31	93	377	4,418	490
Deduct for names counted twice . . . . .	1	3	4			8	270	
Net Total . . . . .	96	82	67	31	93	369	4,148	490

In the above total "auditors" are not reckoned. Of these a large number are in attendance in the various schools of the University.

Special circulars of the various schools will be sent free upon application to the Registrar, New York University, Washington Square, N. Y. In writing please state which circular is desired. The General Catalogue will be sent upon receipt of twenty-five cents.